

Intimidator 4X4 Utility Vehicles

Helpful Hints for Critical Service Items

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Bleeding Air from Coolant System –Intimidator 800

Step 1 – Checking Coolant Level



Material: 50/50 Prediluted Antifreeze Mixture
Tools:

Safety:

- Place the UTV in Park on level ground and turn off the ignition.
- Radiator coolant is under pressure when UTV is hot. Escaping steam can cause severe burns when removing the cap. Allow engine to cool before removing radiator cap or bleeding the coolant system.

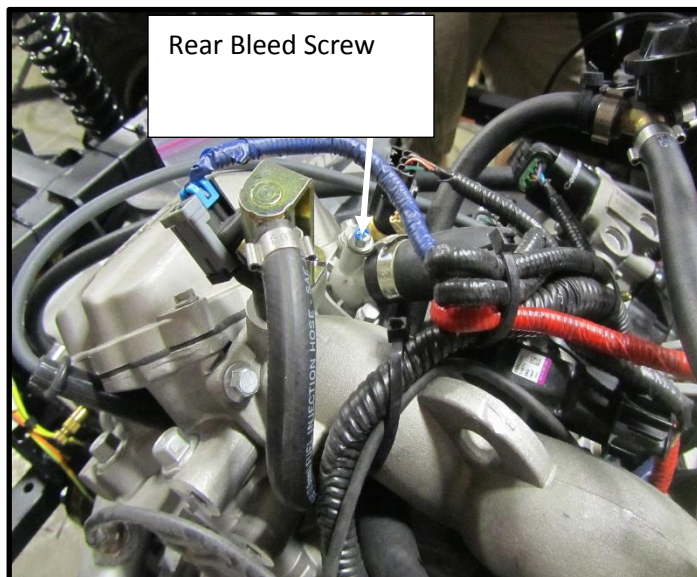
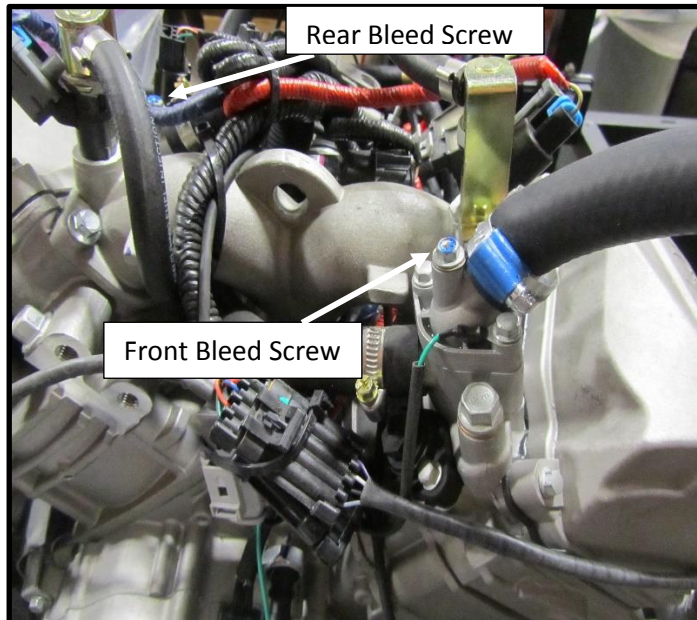
Note: Air can be trapped in the Intimidator 800's black coolant hose that connects the two heads together and needs to be bled out of coolant system.

1. Remove rear seat.
2. With the engine and radiator system **cool** remove the radiator cap under the hood and ensure it is full. If not top it off with a premixed 50/50 Prediluted Antifreeze.



Bleeding Air from Coolant System –Intimidator 800

Step 2 – Bleed Air



Material:

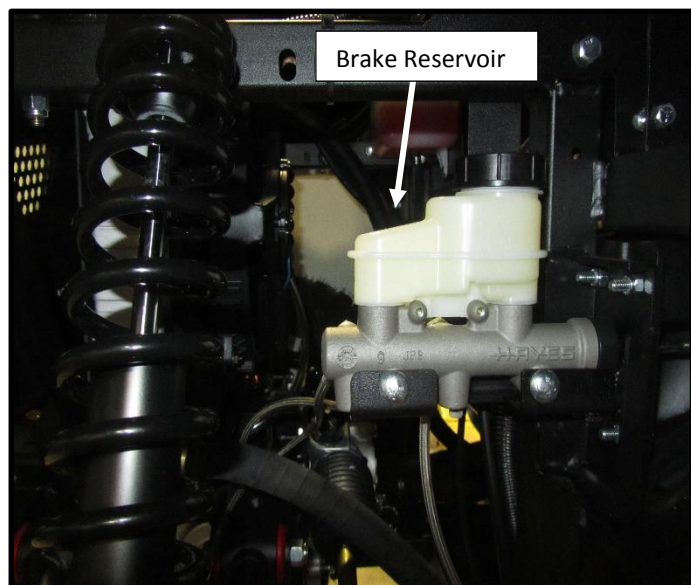
Tools: 5/16" wrench

1. Remove the rear seat.
2. Locate the front and rear bank bleed screws as shown.
3. Using a 5/16" wrench loosen *both* the front and rear bleed screws about two rounds.
4. With the radiator cap still off turn the engine on and let it idle.
5. Closely watch the temperature gauge and keep it below 200 F. As temperature rises to 200 F turn the engine off and let it cool.
6. Add additional antifreeze to the radiator if needed.
7. Repeat steps 4 - 6 while purging the air out. This normally takes ~ 10 minutes.
8. Once all air is purged out (only antifreeze is exiting the bleed screws) turn off the engine.
9. Tighten both bleed screws.
10. Add antifreeze as needed to top off radiator and install the radiator cap.
11. Clean up spills and properly dispose of any used antifreeze.



Brake Fluid –Kohler 750 / Intimidator 800 / Kohler 1000

Step 1 – Checking and Adding Brake Fluid



Material:

Tools:

Safety:

- Place the UTV in Park on level ground and turn off the ignition.

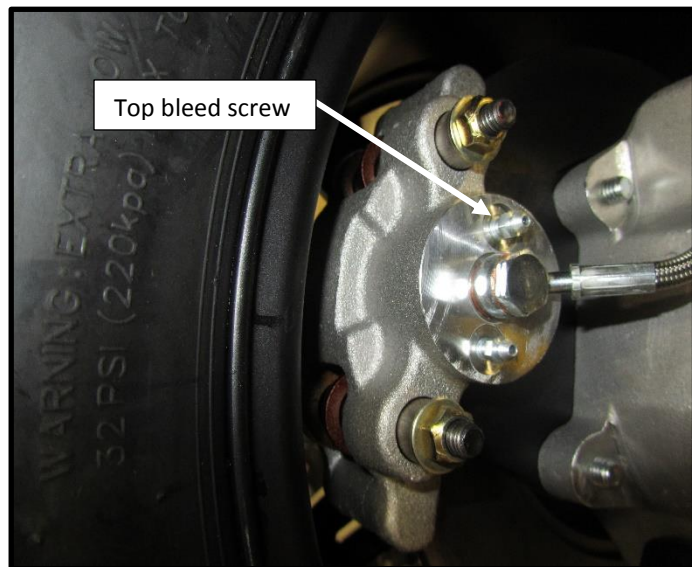
1. Locate the brake reservoir inside of front wheel on driver's side as shown. It can be accessed from hood or from outside by front wheel.
2. If level in reservoir is below the "minimum" level fill with DOT 3 brake fluid up to "maximum" level.

Note: The reservoir has a black rubber seal located under the cap that needs to be removed before filling. When replacing the cap be sure the white plastic washer is installed on cap side along with the black rubber seal installed in its contracted state into the tank.



Brake Fluid –Kohler 750 / Intimidator 800 / Kohler 1000

Step 2 – Bleeding Air



Material:

Tools: 1/4" socket

Note: This step requires 2 people to complete. One person pumping the brakes and the second one to bleed air from the lines at each caliper

1. Pump brake pedal 5 – 6 times and hold down.
2. Starting on the driver's side rear caliper to bleed the brakes use a 1/4" socket to crack open the **top** bleed screw as shown.
3. Repeat pumping the brakes a couple of times until all of the air is removed from the line going to the wheel.
4. Tighten the top bleed screw.
5. Wipe up the spilled brake fluid.
6. Repeat steps 1 - 3 for the other three wheels in the following order
 - Passenger rear caliper
 - Passenger front caliper
 - Driver front caliper
7. Add brake fluid to reservoir per above.

END OF PROCEDURE



Changing Coolant Fluid –Kohler 750 / Intimidator 800 / Kohler 1000

Step 1 – Checking Coolant Level



Material:

Tools:

Safety:

- Place the UTV in Park on level ground and turn off the ignition.
- For easier access to drain radiator use a lift or jack stands.
- Radiator coolant is under pressure when UTV is hot. Escaping steam can cause severe burns when removing the cap. Allow engine to cool before removing radiator cap or bleeding the coolant system.

1. Open hood.
2. Locate expansion tank and radiator cap as shown.
3. If level in expansion tank is below minimum marking when coolant is at room temperature remove the radiator cap.

Step 2 – Add Coolant



Material:

Tools:

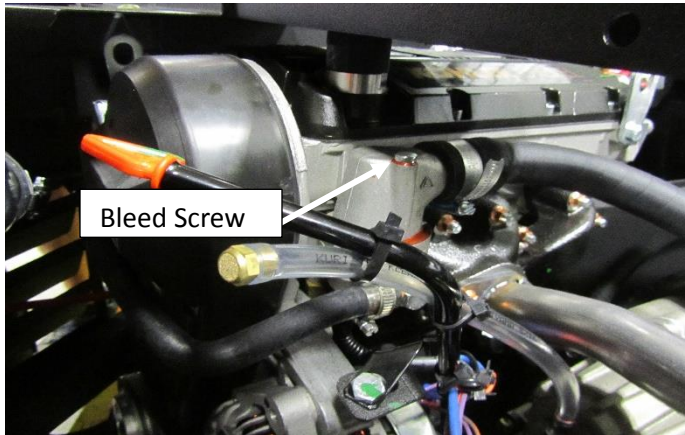
1. Fill with a premixed 50/50 Prediluted Antifreeze to the lower lip of radiator cap well.

Note: Use of the premixed solution or using distilled water is recommended instead of tap water for extended life of radiator. Tap water usually has chemicals that will contribute to fouling of radiator.



Changing Coolant Fluid –Kohler 750 / Intimidator 800 / Kohler 1000

Step 3 – Bleed Air



Material:

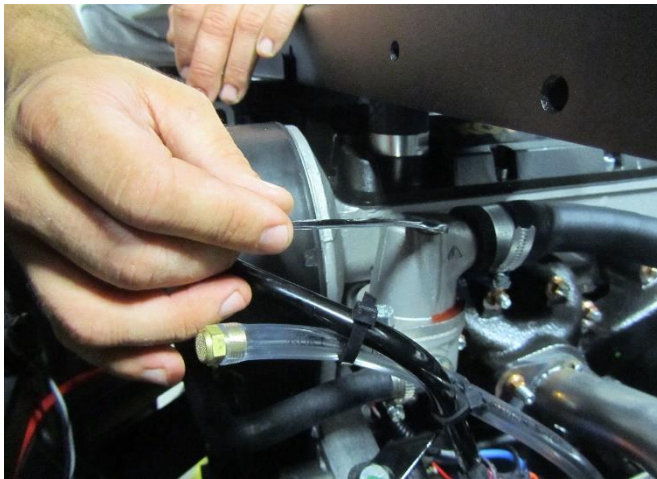
Tools: 10 mm wrench

Note: This step applies to the Kohler 1000 only. See separate procedure for bleeding air out of Intimidator 800 coolant system.

1. To bleed coolant system of air raise the bed and locate the bleed screw on top of thermostat housing as shown in picture.

Note: On Diesel Long Bed models, the bleed screw can be accessed by removing the access panel located on the driver's side of the bed floor.

Step 3 Continued – Bleed Air

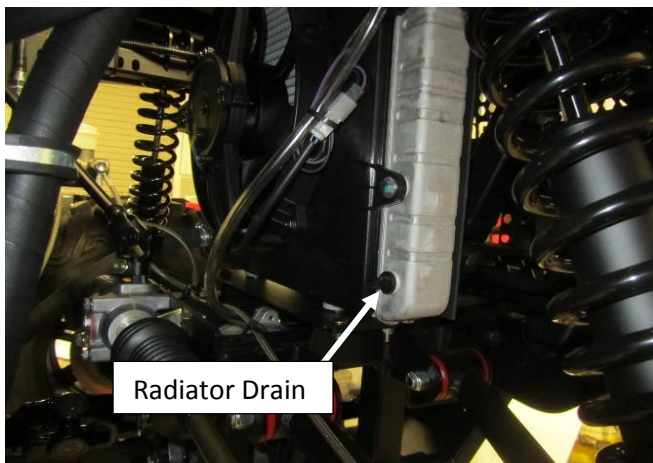


Material:

Tools: 10 mm wrench

2. Loosen the bleed thermostat screw 1- 2 turns with a 10 mm wrench.
3. Allow coolant to flow out into a catch pan until a steady flow is maintained.
4. Tighten the bleed screw.
5. Add coolant as described above.

Step 4 – Drain Radiator



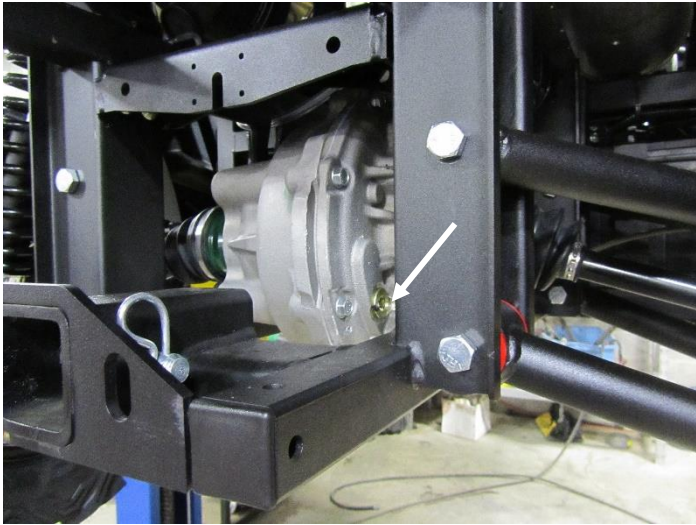
Material:

Tools:

1. To drain coolant from radiator
 - a) Once engine has cooled remove the cap
 - b) Remove the plastic drain plug by twisting counter clock wise with hand
 - c) Drain used coolant into a catch pan
 - d) Reinstall plastic drain plug and tighten by hand.
2. Add coolant as described above.
3. Properly dispose of used coolant.

Changing Rear and Front Differential Oil – Kohler 750 / Intimidator 800 / Kohler

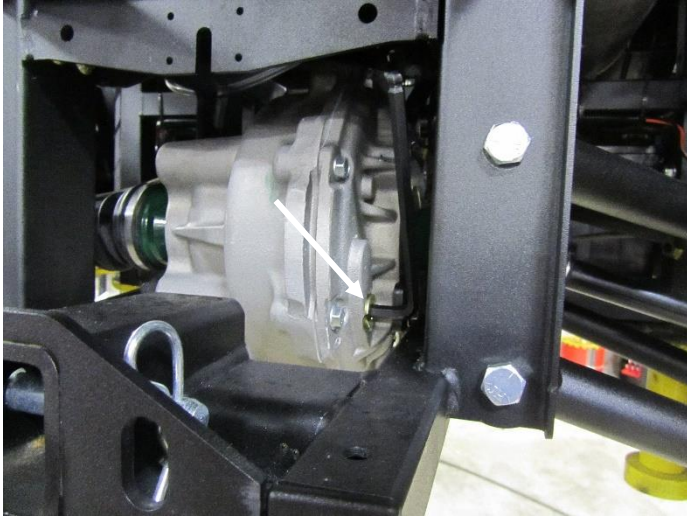


REAR Differential Oil Specifications			FRONT Differential Oil Specifications		
<u>Engine</u>	<u>Oil Capacity</u>	<u>Oil Type</u>	<u>Engine</u>	<u>Oil Capacity</u>	<u>Oil Type</u>
Kohler 750 EFI	550 ml	80W-90 Gear Oil	Kohler 750 EFI	180 ml	Hydraulic
Intimidator 800 EFI	550 ml	80W-90 Gear Oil	Intimidator 800 EFI	180 ml	Hydraulic
Kohler 1000 Diesel	550 ml	80W-90 Gear Oil	Kohler 1000 Diesel	180 ml	Hydraulic
			<p>Note: The Kohler 750, Intimidator 800, and the Kohler 1000 all have the same rear differential. The Kohler 750 and Kohler 1000 have the same front differential but the Intimidator 800 front differential is different. This procedure for changing front and rear differential oil is to be used for all models.</p>		
<p>Step 1 - Preparation and Checking The REAR Differential</p> 			<p>Material:</p> <p>Tools:</p> <p>Safety:</p> <ul style="list-style-type: none"> Place the UTV in Park on level ground and turn off the ignition. For easier access to drain use a lift or jack stands. <p>1. Locate the check/fill plug under the rear of the UTV as shown.</p> <p>Note: Same plug is used for checking level and filling.</p>		

Changing Rear and Front Differential Oil – Kohler 750 / Intimidator 800 / Kohler



Step 1 Continued - Preparation and Checking The REAR Differential



Material:

Tools: 5/16" Allen Wrench

2. Remove the check/fill plug using a 5/16" allen wrench.
3. The proper level is at the bottom of plug hole.
4. To add or fill use 80W-90 gear oil to raise level to bottom of plug hole.

Note: A 5 gallon buck of oil with a hand pump and hose makes it easier to fill.

Step 2 – Drain and Fill Rear Differential



Material:

Tools: 5/16" Allen Wrench

1. To drain use a 5/16" allen wrench to remove the drain plug and drain into a catch pan.
2. Reinstall and tighten the drain plug.
3. Fill the rear differential per step 4 above using 80W-90 gear oil.
4. Properly dispose of used oil.

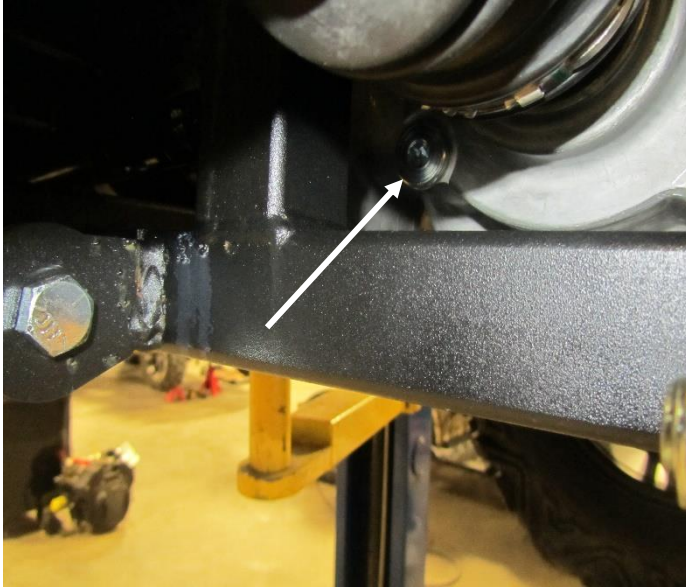
Changing Rear and Front Differential Oil – Kohler 750 / Intimidator 800 / Kohler

1000

INTIMIDATOR

4x4 UTILITY VEHICLES

Step 3 – Check Drain and Fill FRONT Differential



Material:

Tools: 5/16" Allen wrench, socket with a long 5/16" allen wrench

1. Locate the check/fill plug under the front of the UTV as shown.

Note: Same plug is used for checking level and filling.

2. Remove the check/fill plug using a 5/16" allen wrench.
3. The proper level is at the bottom of plug hole.
4. To add or fill use hydraulic oil (John Deere 303) to raise level to bottom of plug hole.

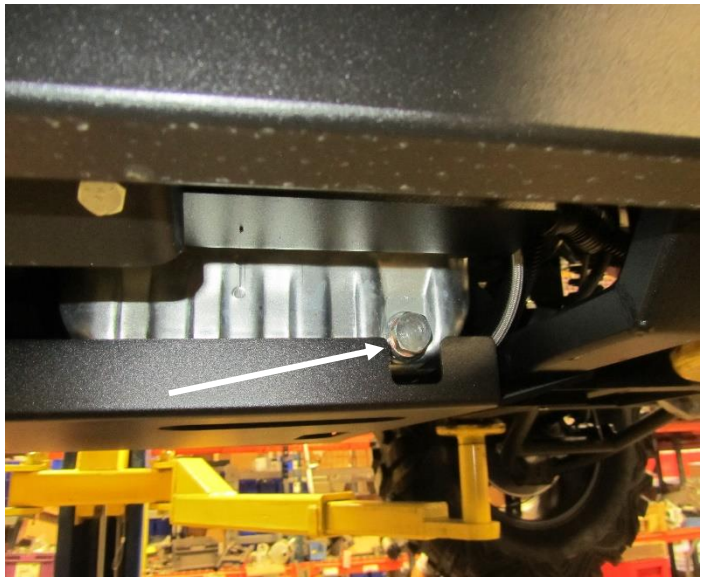
Note: A container with a nozzle or hose makes it easier to fill.

5. To drain use a socket with a long 5/16" allen wrench fitting to remove the drain plug (bottom plug located similarly as rear differential) and drain into a catch pan.
6. Reinstall and tighten the drain plug.
7. Fill the front differential per step 4 above using hydraulic oil (John Deere 303).
8. Install and tighten fill plug.
9. Properly dispose of used oil.

Changing Engine Oil and Oil Filter – Kohler 750 /Intimidator 800 / Kohler 1000



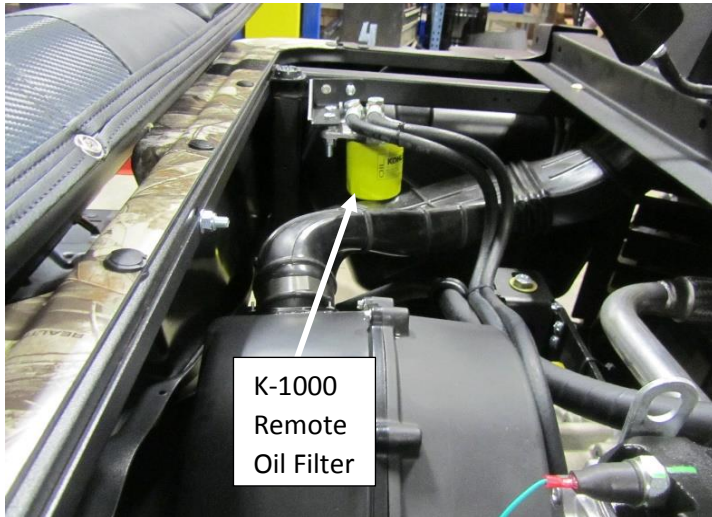
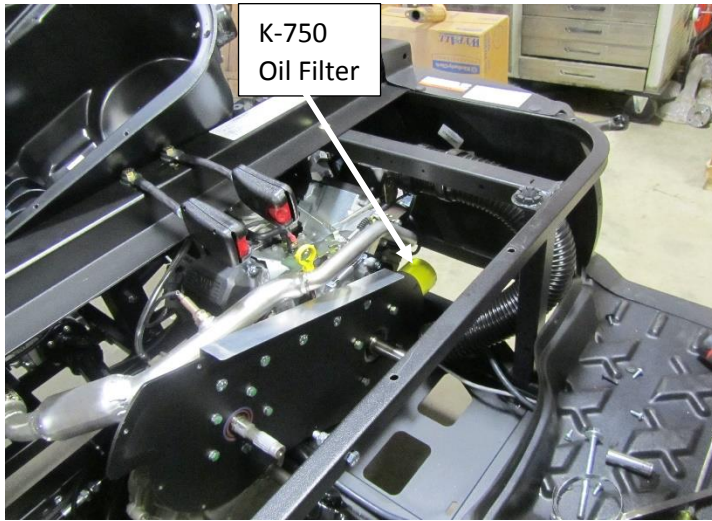
Engine Oil Specifications			
<u>Engine</u>	<u>Oil Capacity (Excluding Filter)</u>	<u>Oil Type</u>	<u>Oil Filter Model #</u>
Kohler 750 EFI	2.0 Quarts	SAE 10W-30	52 050 02-S
Intimidator 800 EFI	2.0 Quarts	SAE 10W-30	715-8052-00
Kohler 1000 Diesel	2.5 Quarts	SAE 10W-30	ED0021752830-S

<p>Step 1 Preparation and Draining</p> 	<p>Material:</p> <p>Tools: 7/8" Socket</p> <p>Safety:</p> <ul style="list-style-type: none"> Place the UTV in Park on level ground and turn off the ignition. For easier access to drain use a lift or jack stands. The engine oil should be warm to best remove it but be careful with Hot Oil as it can burn. <p>Note: The Kohler 750 and 1000 models both have screw in filters but with different locations as described in this procedure in Step 2A. The Intimidator 800 model utilizes a filter cartridge element and its location and replacement are provided in Step 2B.</p> <ol style="list-style-type: none"> 1. Remove the front seat. 2. Locate the drain plug under the UTV as shown in picture. <p>Note: Drain plugs for all models are located similarly with a notch cut out in the skid plate.</p> <ol style="list-style-type: none"> 3. Remove the fill cap and then the drain plug with a 7/8" socket catching the oil in a pan. 4. After oil has drained reinstall the drain plug and tighten to 20 N-Meters.
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Changing Engine Oil and Oil Filter – Kohler 750 /Intimidator 800 / Kohler 1000



Step 2A – Changing Oil Filter – Kohler 750 & 1000



Material:

Tools: Oil Filter Wrench

1. Lower the UTV to level ground.
2. Remove the front seat and locate the oil filter. Remove with a filter wrench catching drips in a pan.

Note 1: The oil filter for the Kohler 750 is located toward the outside under the driver's seat.

Note 2: The remote oil filter for the Kohler 1000 is located under front seat on the passenger's side.

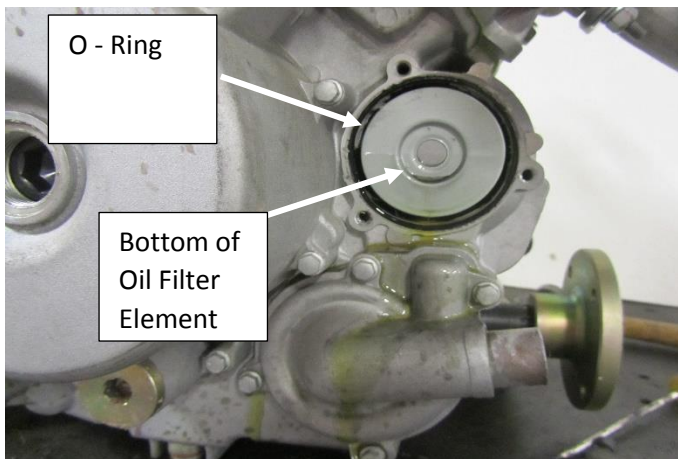
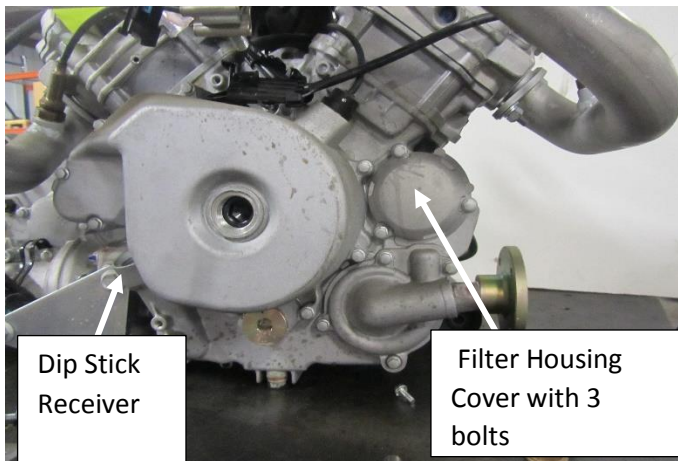
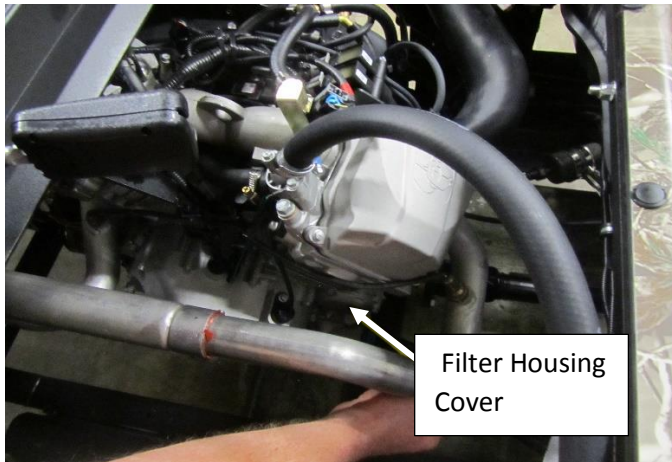
Note 3: The oil filters on pre-2016 diesel models are located on engine block under exhaust manifold and are very difficult to access. Note the procedure "Relocating Oil Filter on Older Style (Pre-2016) Diesels" will allow for much easier changing of this filter.

3. Install a new filter per the table above.
4. Go to step 3 for completion.

Changing Engine Oil and Oil Filter – Kohler 750 /Intimidator 800 / Kohler 1000



Step 2B – Changing Oil Filter – Intimidator 800



Material:

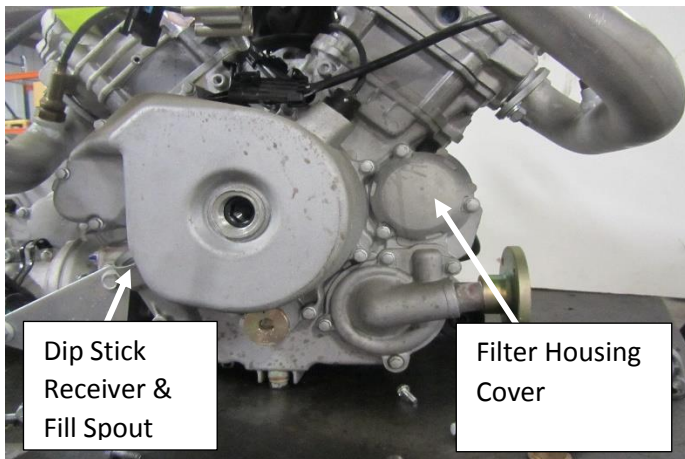
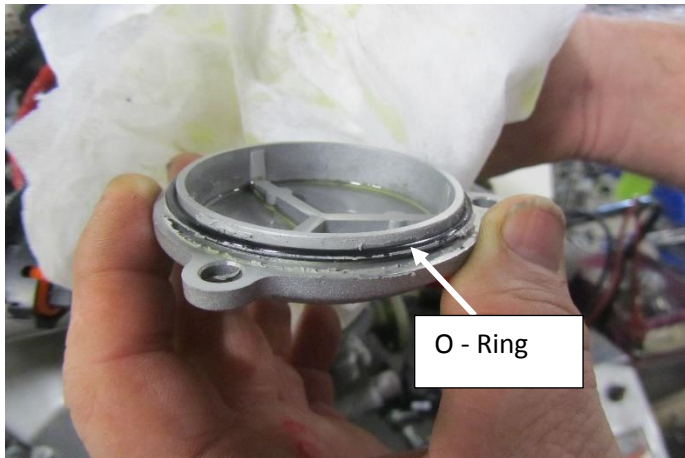
Tools: 5/16" socket, flat screwdriver

1. Remove the front seat and locate the filter housing cover as shown facing toward the passenger's side of the UTV.
 2. Using a 5/16" socket remove the three bolts on the housing cover.
 3. Remove housing cover with a flat blade screw driver since it likely has silicone sealant holding it in place.
 4. Note the black o-ring. Gently remove it so that it can be reused later.
- Note: A new o-ring can be ordered from Intimidator if needed. It does not have a PN.
5. Remove the oil filter element.

Changing Engine Oil and Oil Filter – Kohler 750 /Intimidator 800 / Kohler 1000



Step 2B Cont. – Changing Oil Filter – Intimidator 800

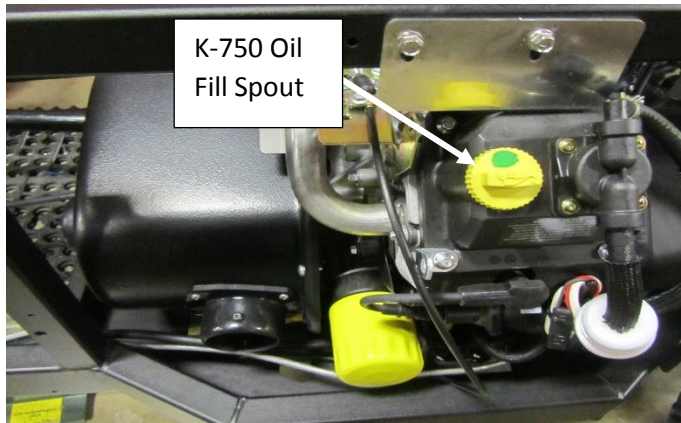


6. Moisten the black rubber seal on top of the filter element with fresh oil.
7. Insert the filter element into the housing with the rubber seal end first.
8. Clean any foreign mater and residual silicone sealant from the o-ring and housing cover.
9. Slip the o-ring over the housing cover as shown.
10. Apply a fine bead of silicone sealant to the cover sealing surface.
11. Mount cover to housing making sure the o-ring is not pinched.
12. Install three bolts and tighten with a 5/16" socket. Do not overtighten.

Changing Engine Oil and Oil Filter – Kohler 750 /Intimidator 800 / Kohler 1000



Step 3 – Fill and Check Engine



Material:

Tools:

1. Locate the fill spout.

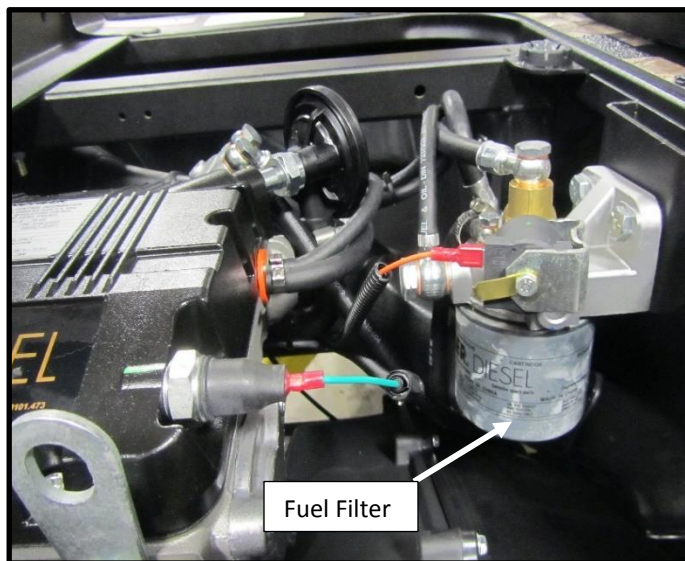
Note: The Intimidator 800 fill spout is the same as the dip stick and a funnel will be needed. See picture in step 2B.

2. Add the oil type and amount as shown in table above.
3. Replace the fill cap. Start engine for a few minutes.
4. Check for oil leaks and correct any leaks that are found.
5. Check oil level and top off as needed.
6. Reinstall front seat.
7. Properly clean up spills and dispose of used oil.



Changing Fuel Filter – Kohler 1000

Step 1 – Replacing Fuel Filter



Material: Oil Filter PN - Kohler ED2175-288-S

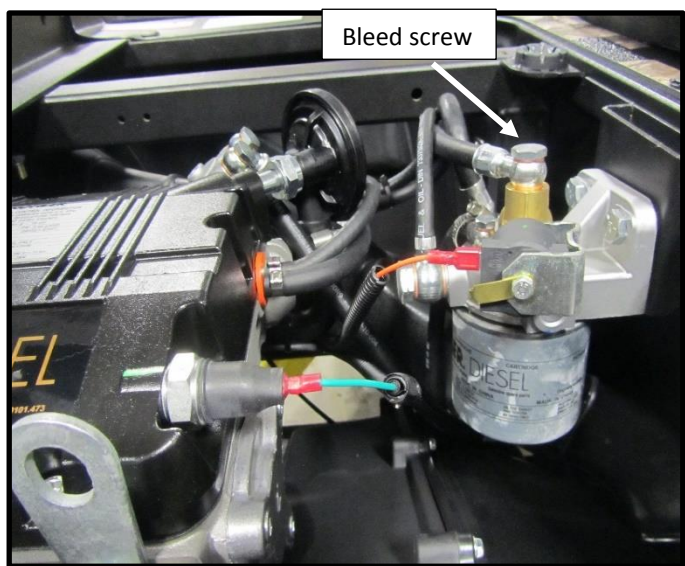
Tools: Oil Filter Wrench

Safety:

- Place the UTV in Park on level ground and turn off the ignition.

1. Remove the front seat.
2. Locate the fuel filter under front seat as shown.
3. Remove fuel filter with an oil filter wrench.
4. Install new filter and tighten using a filter wrench.

Step 2 – Filling Fuel Filter



Material:

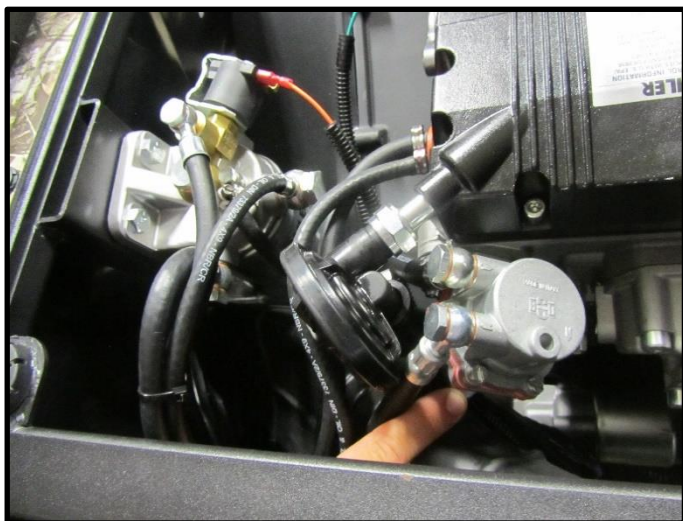
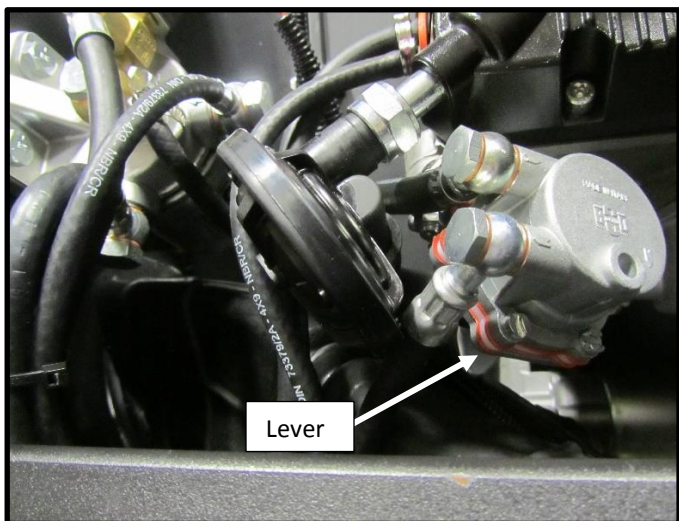
Tools: 9/16" socket

1. Loosen the top banjo bolt on the fuel filter assembly about 1/2 turn with a 9/16" socket.
2. Turn ignition on but **Do Not** start the engine at this time.



Changing Fuel Filter – Kohler 1000

Step 2 Continued - Filling Fuel Filter



Material:

Tools:

3. To fill the fuel filter locate the lever on the manual fuel pump and pump it until diesel starts running out the top around the loosened banjo bolt.

Note: Starting the engine while hand pumping could cause the fuel pump rod to come off.

4. Tighten the banjo bolt on top of assembly.
5. Start the engine to ensure fuel filter is filled. If it does not start loosen the top banjo bolt on the fuel filter assembly and repeat steps 1-2 above again.



Changing Transmission / Gearbox Oil – Kohler 750 / Kohler 1000

Transmission / Gear Box Oil Specifications

<u>Engine</u>	<u>Oil Capacity</u>	<u>Oil Type</u>
Kohler 750 EFI	700 ml	Decron VI
Intimidator 800 EFI	420 ml	GL-4-90 Gear Oil
Kohler 1000 Diesel	700 ml	Decron VI

Note: The Kohler 750, Kohler 1000, and the EV all have the same transmission and this procedure should be followed when changing transmission oil. The Intimidator 800 procedure for changing out the transmission oil is provided in the Owner's Manual.

Step 1 - Preparation and Draining



Material:

Tools:

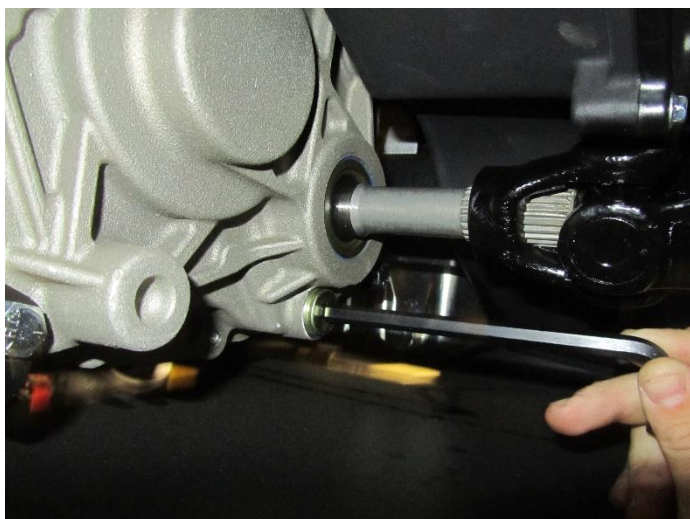
Safety:

- Place the UTV in Park on level ground and turn off the ignition.
- For easier access to drain use a lift or jack stands.

1. Locate the transmission under the middle of the UTV and its drain plug as shown.

Note: The skid plate can be removed for easier access.

Step 1 Continued - Preparation and Draining



Material:

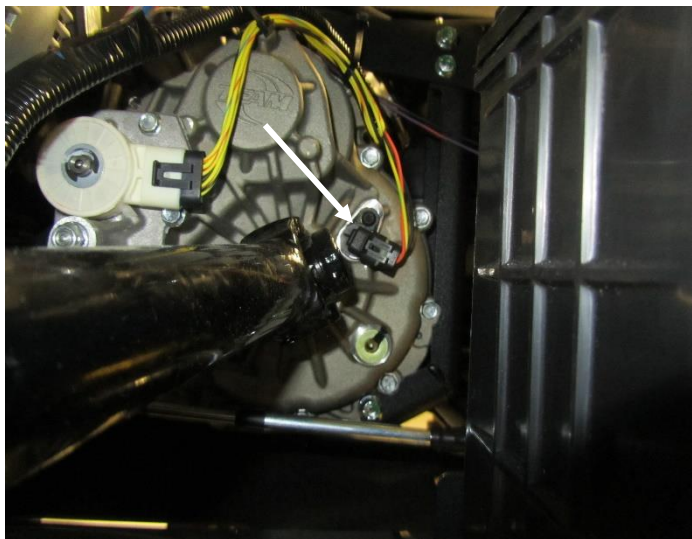
Tools: 5/16" Allen Wrench

2. Place a catch pan under the drain and remove the drain plug using a 5/16" allen wrench.
3. Drain transmission case and clean up any spills.
4. After oil has drained reinstall the drain plug.



Changing Transmission / Gearbox Oil – Kohler 750 / Kohler 1000

Step 2 – Fill Transmission Case



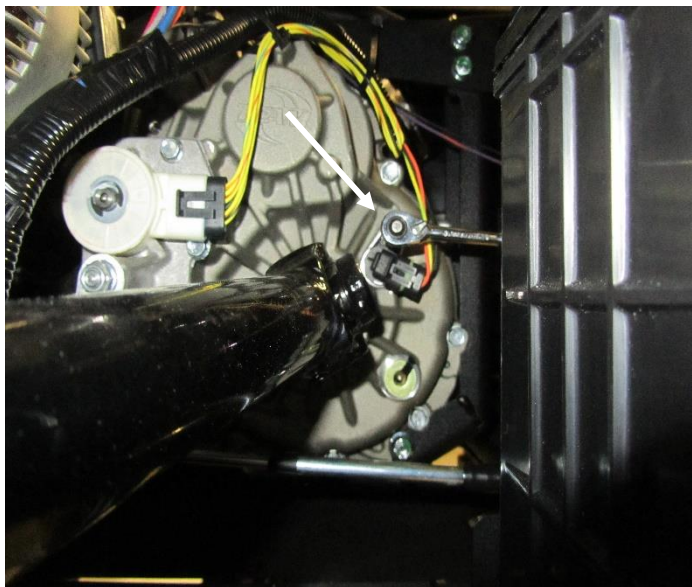
Material:

Tools:

1. Locate speed sensor on the rear end of the transmission as shown and disconnect its leads.

Note: Since the transmission is at an angle it is best to fill through the speed sensor hole.

Step 2 Continued – Fill Transmission Case



Material:

Tools: T-27 Torx Socket

2. Using a T-27 Torx fitting remove screw holding speed sensor.
3. Remove the speed sensor.



Changing Transmission / Gearbox Oil – Kohler 750 / Kohler 1000

Step 2 Continued – Fill Transmission Case



Material:

Tools: T-27 Torx Socket

4. Add the type and amount of oil as shown in table above through the speed sensor hole using a bottle with a hose or funnel.

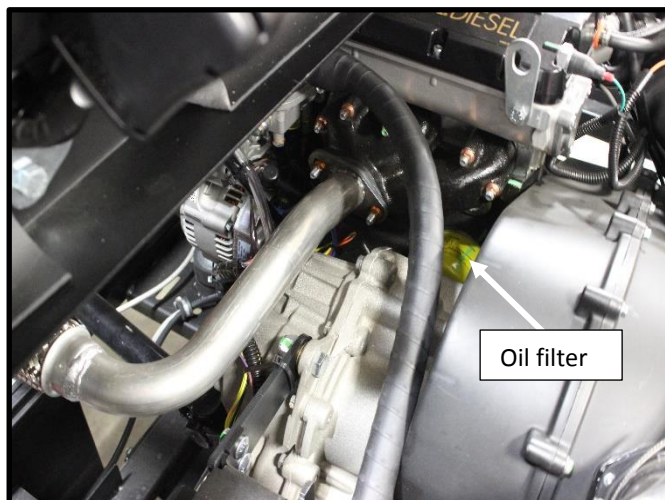
Note: There is no way to check level so it is critical that the exact amount be added.

5. Reinstall speed sensor and tighten screw.
6. Reconnect leads.
7. Clean up any spills and properly dispose of any used oil.
8. Start engine and check for leaks.



RELOCATING OIL FILTER ON OLDER STYLE (PRE – 2016) DIESEL

Step 1 – Preparation



Material:

Tools:

Safety:

- Place the UTV in Park on level ground and turn off the ignition.
- Allow the engine to cool before doing this procedure to prevent burns.

Note: This procedure is for pre-2016 diesel models.

1. Remove the back seat.
2. Locate the oil filter on the older diesel models as shown.

Step 2 – Uncovering / Removing the Oil Filter

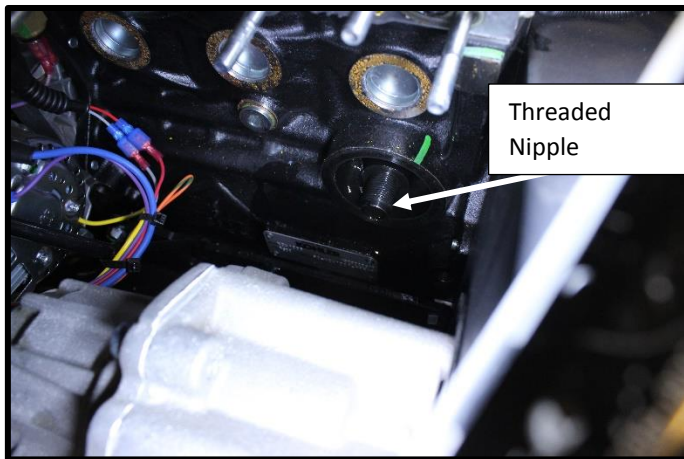
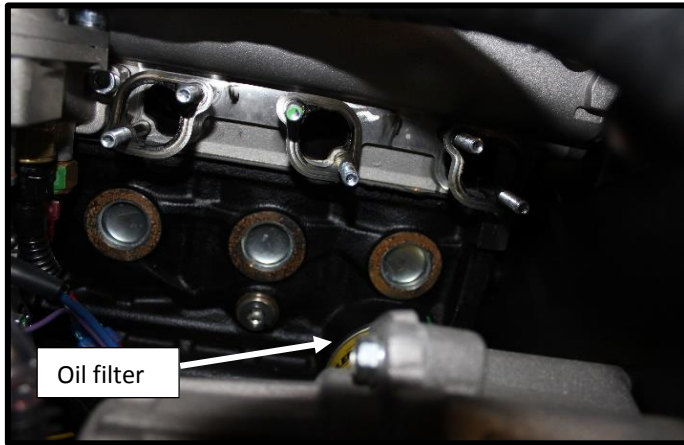


Material:

Tools: 10mm socket

1. Using a 10 mm socket remove the 2 nuts that connect the exhaust pipe to manifold as shown. Keep nuts for reinstallation.
2. Pull the exhaust pipe back out of the way.
3. Using a 10 mm socket remove the 6 nuts on the exhaust manifold as shown. Keep nuts for reinstallation.

Step 2 Cont. – Uncovering / Removing the Oil Filter



Material:

Tools: Oil filter wrench, heat gun, vice grip pliers

4. Leaving the gaskets in place remove the exhaust manifold allowing access to the oil filter below.
5. Using an oil filter wrench and a pan to catch any spills remove the oil filter.

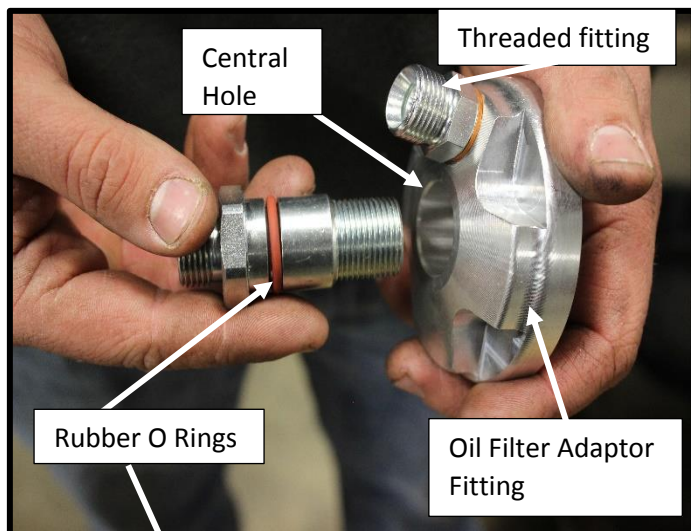
Note: It is a tight fit and there may not be room for a filter wrench. A screw driver and hammer may be required to remove the filter.

6. The threaded nipple for the oil filter as shown will need to be removed.
7. Use a heat gun to heat up nipple (usually long enough for oil just to begin to smoke).
8. Use vice grip pliers to screw out the nipple which has right hand threads.



RELOCATING OIL FILTER ON OLDER STYLE (PRE – 2016) DIESEL

Step 3- Installing Filter Adaptor Fitting / Connections



Material: Remote Oil Filter Kit

(Kohler Part # ED161434), wheel bearing grease

Tools: 3/4" wrench

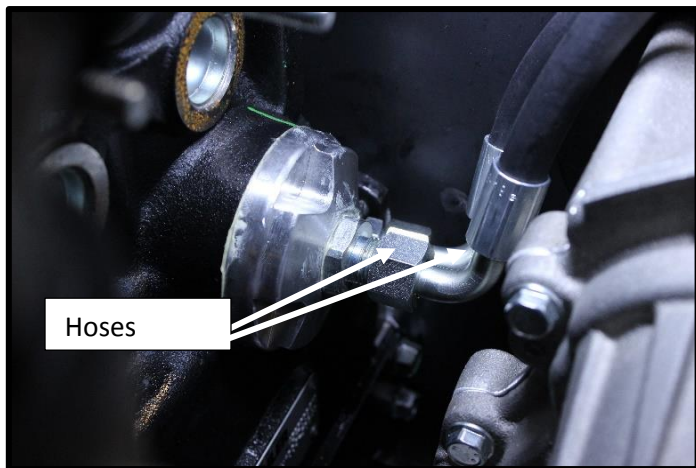
1. Open the package and note that the parts include:
 - Oil Filter
 - Oil Filter Adaptor Fitting
 - 2 Oil Filter Adaptor Fitting Connectors
 - 2 identical hoses
 - Oil Filter Mount
 - 2 bolts for banjo fitting
 - 2 Rubber O-Rings
 - Copper washers
2. Locate the Oil Filter Adaptor Fitting and the 2 fittings.

Note: The smaller offset hole is for the oil return from the relocated filter and has internal threads. The central hole is the unfiltered oil supply connection to the filter and has no threads.
3. Use Teflon tape on the threads of the smaller fitting. Install a copper washer and screw the smaller fitting into the offset hole. Tighten with a 3/4" wrench.
4. Install the 2 rubber O-rings in both the central connector and on the bottom of the Oil Filter Adaptor Fitting as shown.
5. Apply a liberal amount of wheel bearing grease around both of the O-rings.
6. Insert the central connector into its hole.



RELOCATING OIL FILTER ON OLDER STYLE (PRE – 2016) DIESEL

Step 3 Cont. – Installing Filter Adaptor Fitting / Connections



Material:

Tools: 1" wrench, 7/8" wrench

7. Mount the Oil Filter Adaptor Fitting to the engine by threading the central connector into fitting where the nipple was previously removed in Step 2 above.
8. Tighten the central connector with a 1" wrench.
9. Install the 90 degree end of the 2 hoses to each of the connectors in the Oil Filter Fitting Adaptor as shown.
- Note: Hoses are identical.
10. Tighten with a 7/8" wrench.

Step 4 – Installing the Mounting Bracket



Material: Mounting Bracket Kit
Intimidator Part # 7392303

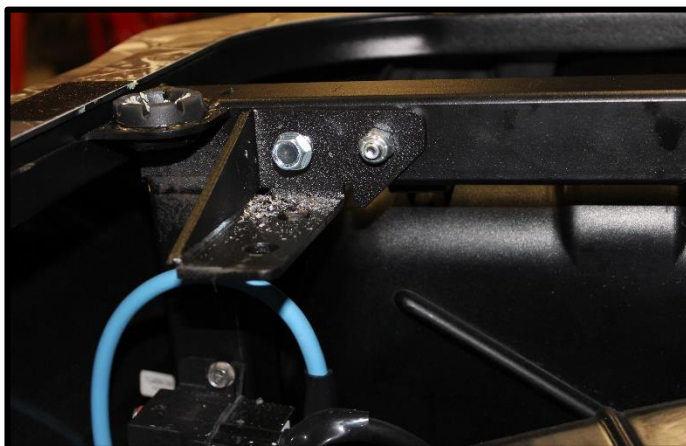
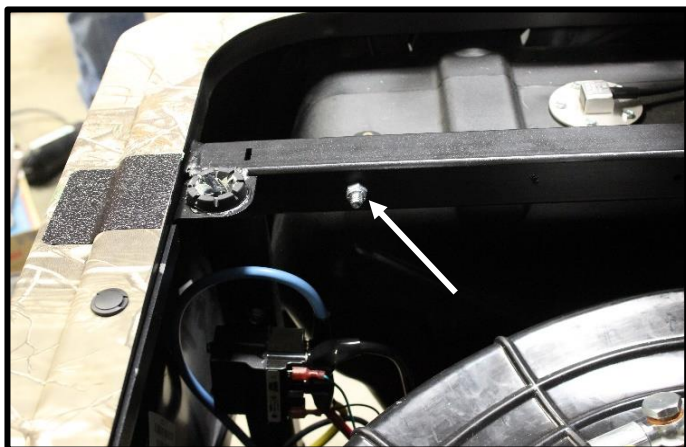
Tools:

1. Note the parts in the mounting bracket kit.
 - mounting bracket
 - 2 carriage bolts with nylock nuts
 - 2 self-taping screws
 - 2 spacers
 - Bolt with copper washer



RELOCATING OIL FILTER ON OLDER STYLE (PRE – 2016) DIESEL

Step 4 Cont. – Installing the Mounting Bracket



Material:

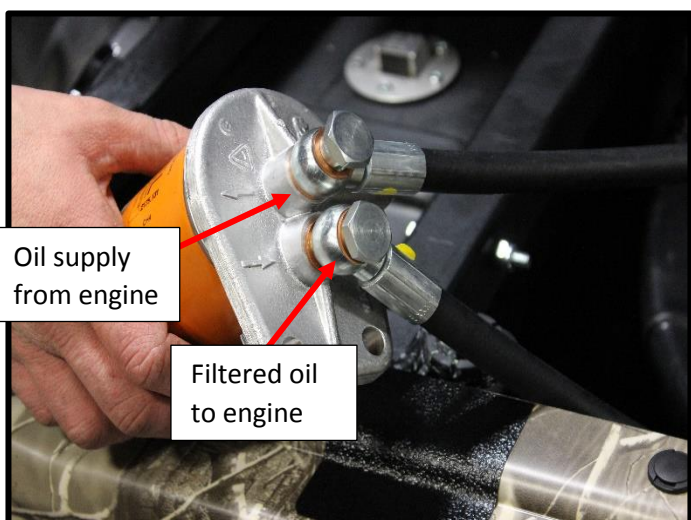
Tools: 1/4" drill bit, 13 mm socket

2. Locate the existing bolt through the support tubing by the gas tank as shown and remove it.
3. Mount the bracket using the existing hole and bolt.
4. Using a 1/4" bit drill a hole into support tubing as shown through the other mounting hole.
5. Secure bracket with self-taping screw through the hole just drilled. Tighten with a 13 mm socket.



RELOCATING OIL FILTER ON OLDER STYLE (PRE – 2016) DIESEL

Step 5 – Install New Oil Filter



Material:

Tools: 13 mm wrench, 3/4" wrench

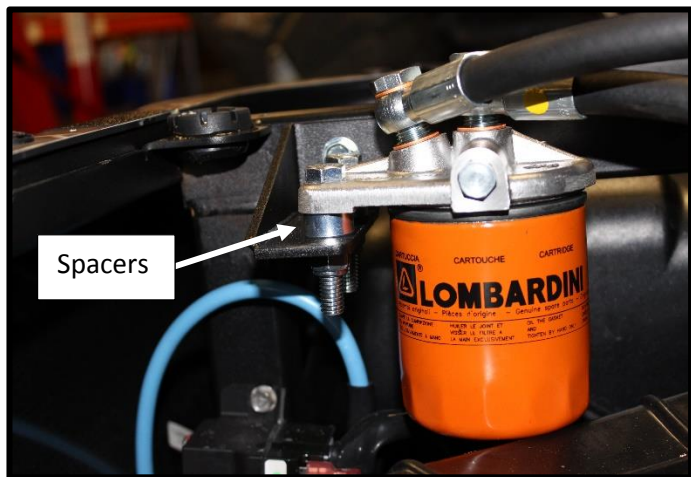
1. Locate the Oil Filter Mount and screw into a new oil filter.
2. Install the copper washer and screw in the bolt into the Oil Filter Mount as shown. Tighten with a 13 mm wrench.
3. Insert copper washers on each side of the banjo fittings on both hoses. Connect these ends of the 2 hoses mounted in Step 3 to the Oil Filter Mount by screwing in the banjo bolts as shown. Tighten with a 3/4" wrench.

Note: The hoses are connected from “center to center” and “offset to offset” from the Oil Filter Adaptor Fitting on the engine to the Oil Filter Mount.



RELOCATING OIL FILTER ON OLDER STYLE (PRE – 2016) DIESEL

Step 5 Cont. – Install New Oil Filter



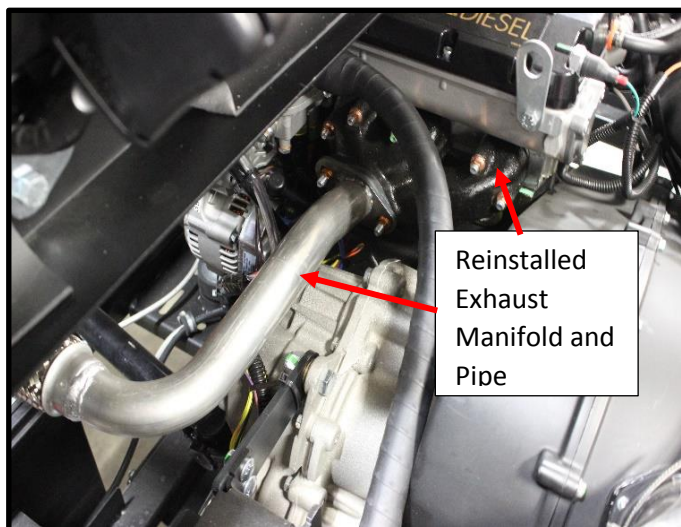
Material: Spare bolt and washer

Tools: 9/16" wrenches

4. Insert the 2 carriage bolts through the Oil Filter Mount and then 2 spacers as shown.
5. Install this assembly onto the bracket and secure bolts with nylock nuts. Tighten with 9/16" wrenches.

Final Installation

Step 6 – Complete Work and Check Out



Material:

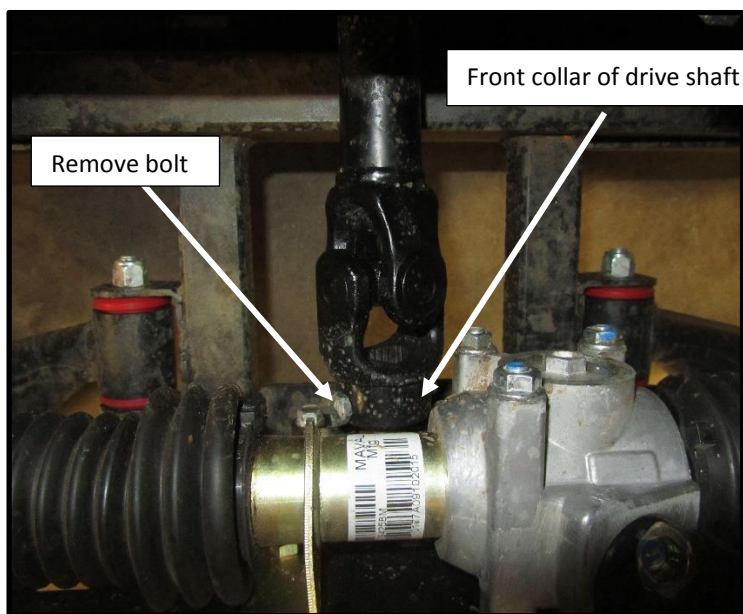
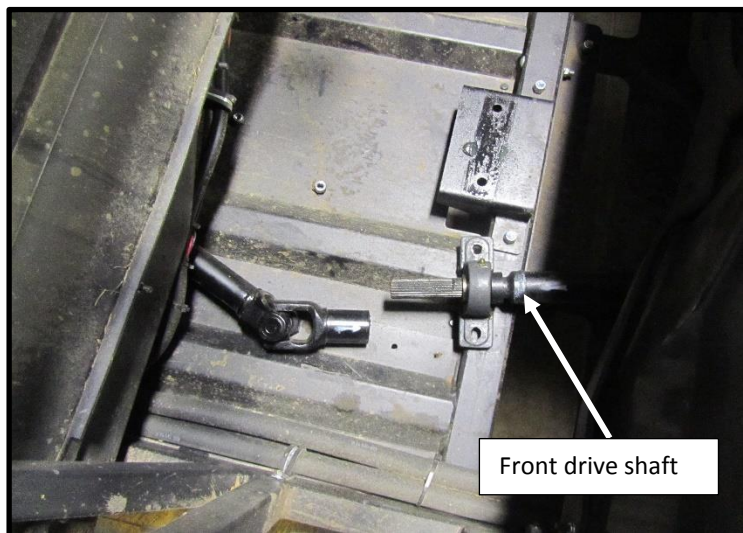
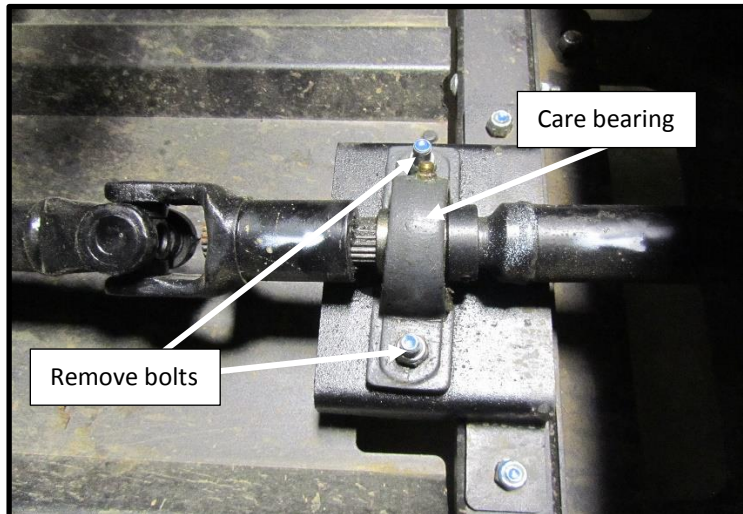
Tools: 10 mm socket

1. Reversing the steps in Step 2 above reinstall the exhaust manifold cover and the exhaust pipe using existing nuts and gaskets.
2. Start the engine.
3. Check for leaks and tighten connections around any that are found.
4. Check oil level and top off as needed.
5. Properly dispose of any used oil.



Adjusting Play in Drive Shaft –Intimidator 800

Step 1 – Removing the Front Drive Shaft



Material:

Tools: 9/16" socket, 1/2" socket

Safety:

- Place the UTV in Park on level ground and turn off the ignition. Chock one of the rear tires (both front and back). Jack up the front end and use 2 jack stands in the front to support the UTV during this procedure.

Note: Pictures in this procedure are of the Intimidator which has a two piece drive shaft. The Kohler 750 and Kohler 1000 both have one piece drive shafts and have a separate procedure.

1. Remove the front seat.
2. Locate the care bearing under front seat as shown in picture and remove the 2 bolts using a 9/16" socket.
3. Separate the front drive shaft from the rear drive shaft.
4. Using a 1/2" socket remove the bolt on the front end of the drive shaft under the hood as shown.



Adjusting Play in Drive Shaft –Intimidator 800

Step 1 Cont. – Removing the Front Drive Shaft

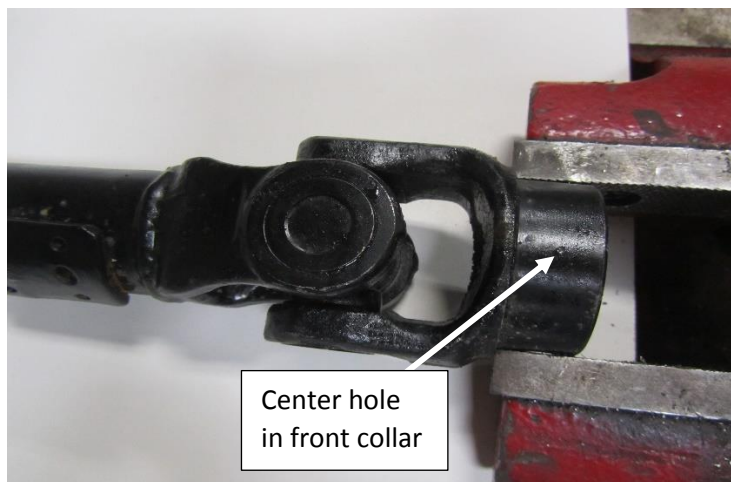


Material:

Tools:

5. Remove the front drive shaft through the front end of the UTV as shown.

Step 2 – Installing Set Screws



Material: Loctite, 3 –1/4" set screws (20 x 5/8" long.

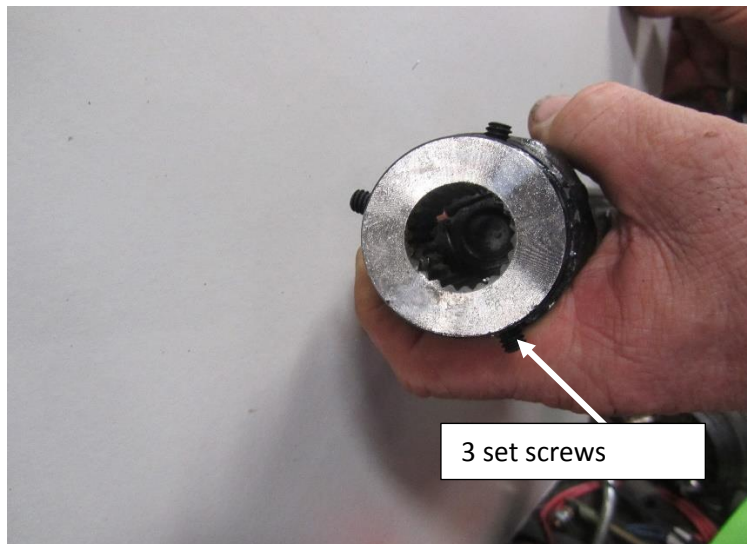
Tools: Drill with 1/8" bit and 13/64" bit, 1/4" tap, hand file

1. Place front collar in a vice and using a set punch start a hole at the center of the collar as shown.
2. Drill through the collar with a 1/8" drill bit. Follow with a 13/64" drill bit.
3. Use a 1/4" tap to install threads.
4. Use a hand file to gently remove any burrs inside the collar from the drilling operation.



Adjusting Play in Drive Shaft –Intimidator 800

Step 2 Cont. – Installing Set Screws

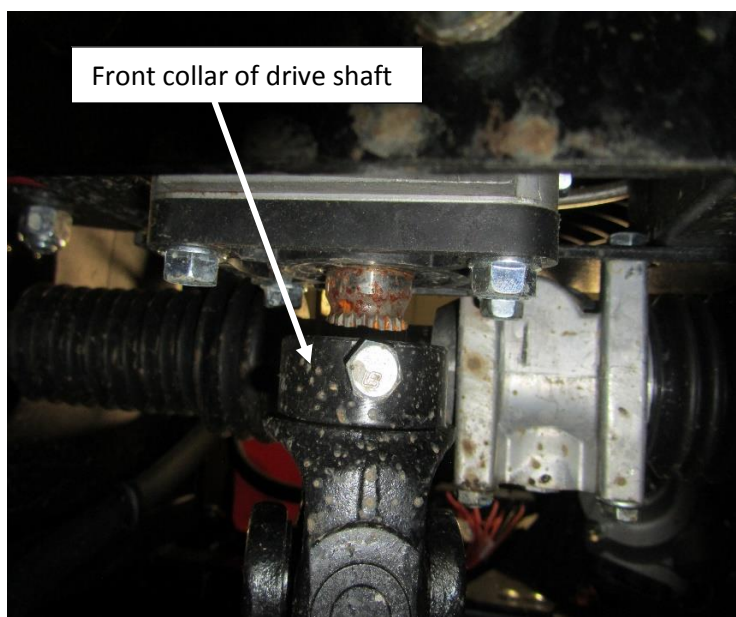


Material:

Tools:

5. Apply Loctite and partially install the 1/4" set screw.
6. Repeat steps above and install two more set screws equally spaced around the collar as shown.

Step 3 – Installing the Front Half of Drive Shaft



Material:

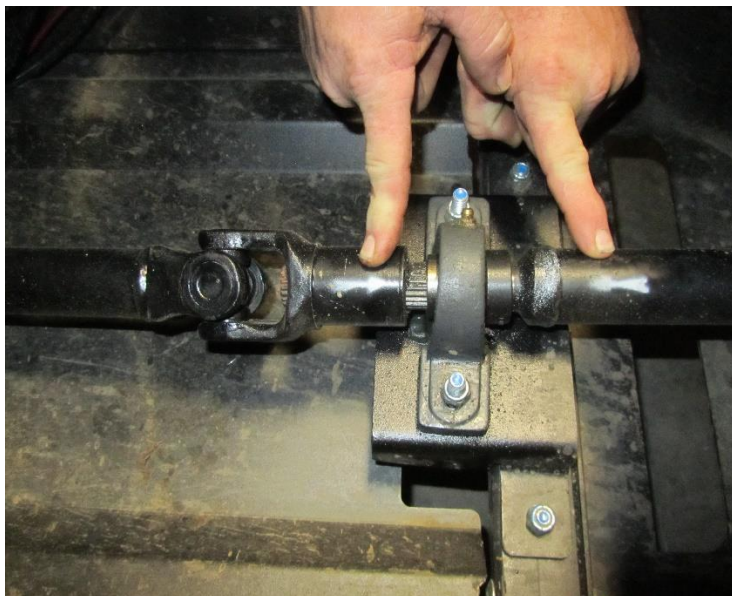
Tools: 1/2" socket

1. Installation of half shaft is the reverse of removing it.
2. Position the front half of the drive shaft through the front end of the UTV for installation.
3. Slide the front collar over the input spline of front differential and using a 1/2" socket install and tighten bolt on front end of drive shaft in front of UTV.



Adjusting Play in Drive Shaft –Intimidator 800

Step 3 Cont. – Installing the Front Half of Drive Shaft



Material:

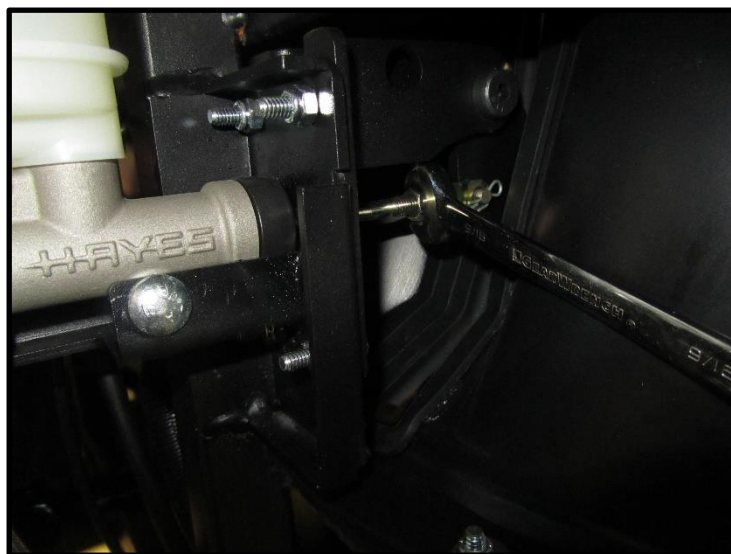
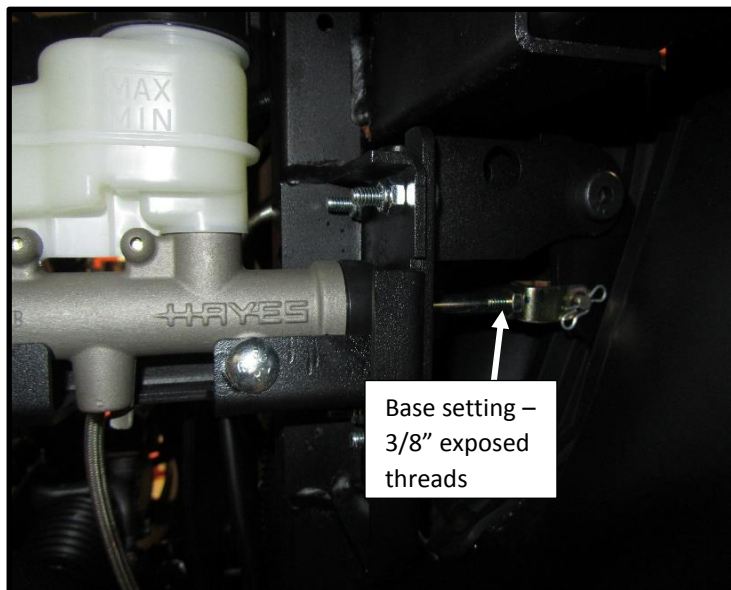
Tools: 9/16" socket

4. Under the front seat align the two u-bolts to match with the arrows as shown. Use 9/16" socket to tighten care bearing in place.
5. Tighten the 3 set screws partially installed earlier on the front collar under the hood.
6. Reinstall the front seat and lower the UTV onto the ground.



Adjusting the Brake Master Cylinder Rod—Kohler 750 / Intimidator 800 / Kohler 1000

Step 1 – Adjusting the Master Cylinder Rod



Material:

Tools: 9/16" wrench

Safety:

- Place the UTV in Park on level ground and turn off the ignition.

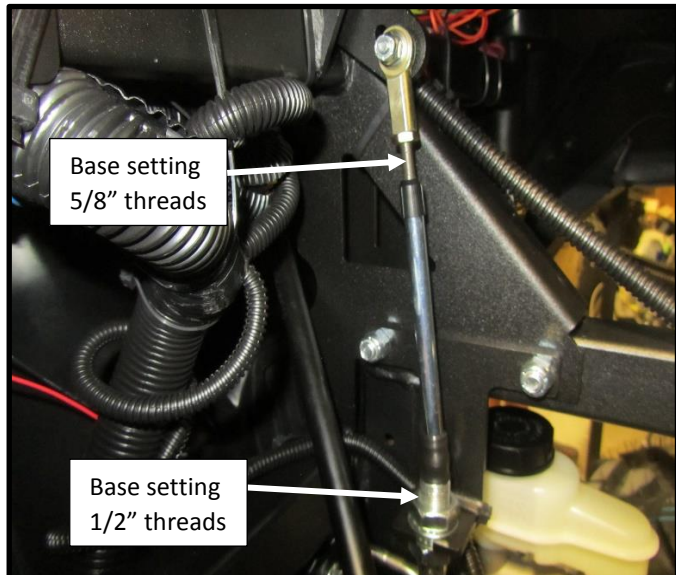
1. Locate the Master Cylinder and the attached rod inside the driver's side front fender well as shown.
 2. The base setting is 3/8" exposed thread to front of UTV as shown. This setting should provide 1/8" slack in brake pedal before compression.
 3. To adjust the Master Cylinder rod use a 9/16" wrench to loosen the jamb nut as shown. The rod may need to be held with pliers while loosening the jamb nut.
 4. To remove slack from pedal shorten the rod connection by turning clockwise which exposes less threads toward front of UTV.
- Note: Removing too much slack in pedal will cause the brakes to be engaged all the time.

5. To increase slack in pedal turn the rod connection counterclockwise which exposes more threads toward front of UTV.
6. After adjustment is made tighten the jamb nut.
7. Operate the UTV to ensure the brakes are adjusted properly. If not repeat the above steps.



Adjusting Gear Shift Cable –Kohler 750 and Kohler 1000

Step 1 – Front Gear Shift Cable



Material:

Tools:

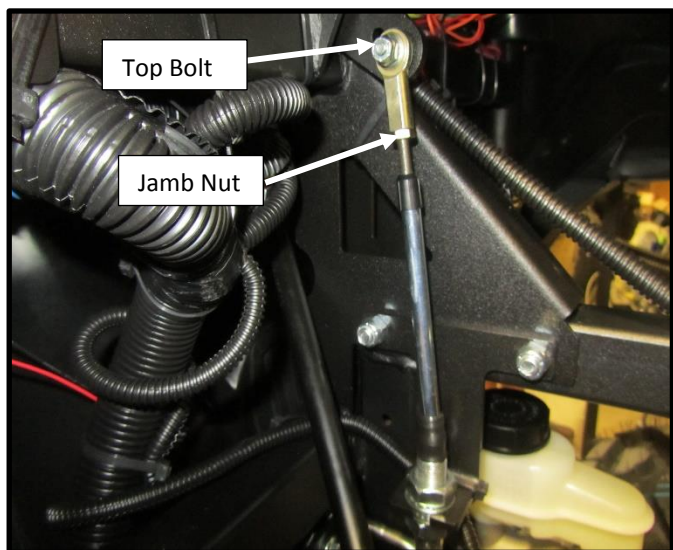
Safety:

- Place the UTV in Park on level ground and turn off the ignition.

Note: When the shift cable needs adjusting (normally when either the "Park" position or the "High" position is difficult to shift into) it is important to check and set the front and rear gear shift cables back to their *base settings*.

1. Locate the front shift cable under the hood on the driver's side.
2. *Base settings* for the front shift cable are
 - a) The top of the front shift cable should have ~5/8" of exposed threads below the jamb nut as shown.
 - b) The bottom of the front shift cable should have ~1/2" of exposed threads above the top of the jamb nut as shown.

Step 2– Adjusting the Front Gear Shift Cable



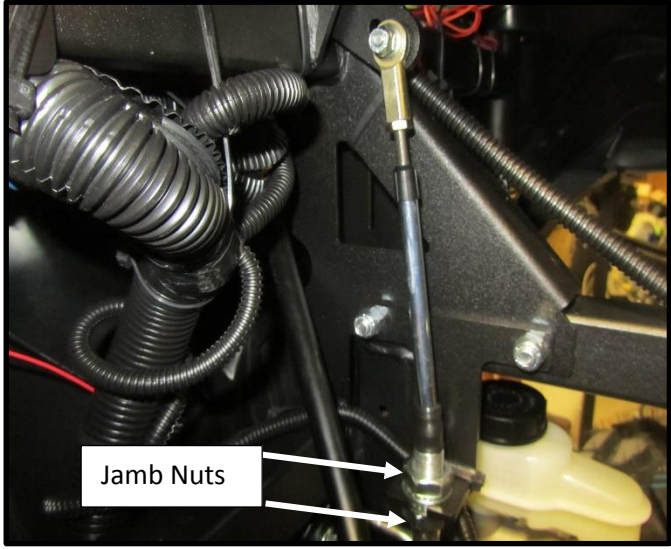
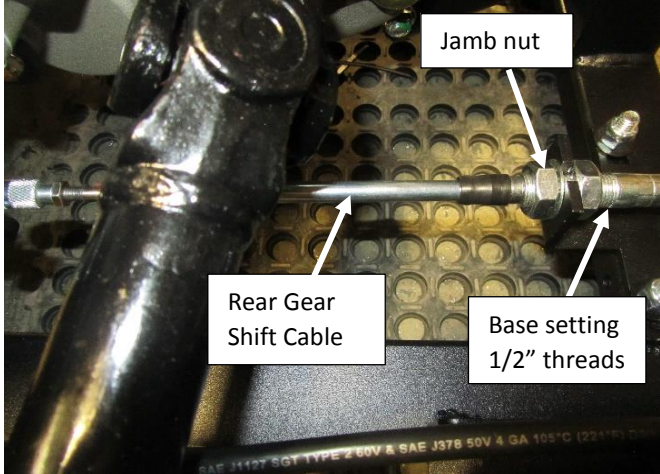
Material:

Tools: 7/16" wrench and socket

1. To adjust the top of the front shift cable
 - a) Loosen the top jamb nut with a 7/16" wrench.
 - b) Remove the top bolt with a 7/16" socket to free the cable and allow adjustment.
 - c) Turn the top of the cable by hand to adjust to top *base setting* of 5/8" exposed threads.
 - d) Adjusting to the *base settings* will normally allow the proper shifting but further adjustments can be made by shortening the cable (reduces exposed threads) to move it more to the "Park" position. Lengthening the cable (exposing more threads) allows more shifting to the "High" position.



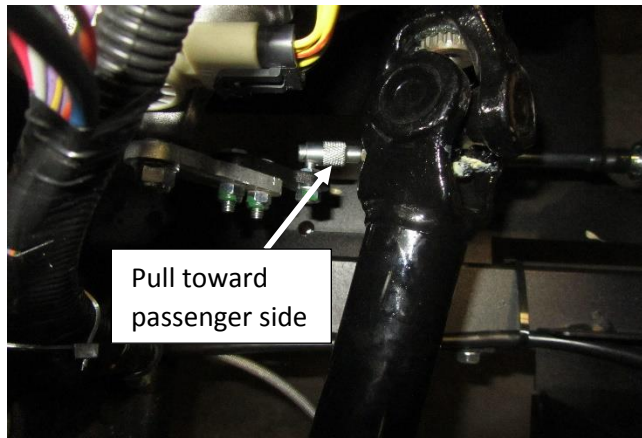
Adjusting Gear Shift Cable –Kohler 750 and Kohler 1000

	<p>Note: Need to leave at least 1/4" of threads inside the top of housing to prevent stripping out the threads during shifting.</p> <p>e) Tighten the top jamb nut on the front gear shift cable and reinstall top bolt and tighten.</p>
<p>Step 2 Cont.– Adjusting the Front Gear Shift Cable</p>  <p>Jamb Nuts</p>	<p>Material:</p> <p>Tools: 2 – 15/16" wrenches</p> <ol style="list-style-type: none"> To adjust the bottom of the front shift cable <ol style="list-style-type: none"> Using two 15/16" wrenches loosen the two jamb nuts at the bottom of the front cable. Rotate the cable until achieving the base setting of 1/2". <p>Note: Further adjustment on the bottom end of the front cable is not recommended.</p> Tighten the jamb nuts.
<p>Step 3 – Adjusting Rear Gear Shift Cable</p>  <p>Jamb nut</p> <p>Rear Gear Shift Cable</p> <p>Base setting 1/2" threads</p>	<p>Material:</p> <p>Tools:</p> <ol style="list-style-type: none"> If adjustment to the front shift cable does not allow proper shifting locate the rear shift cable by removing the back seat or by raising the bed. The <i>base setting</i> for the rear shift cable is 1/2" of exposed thread toward the passenger side as shown.

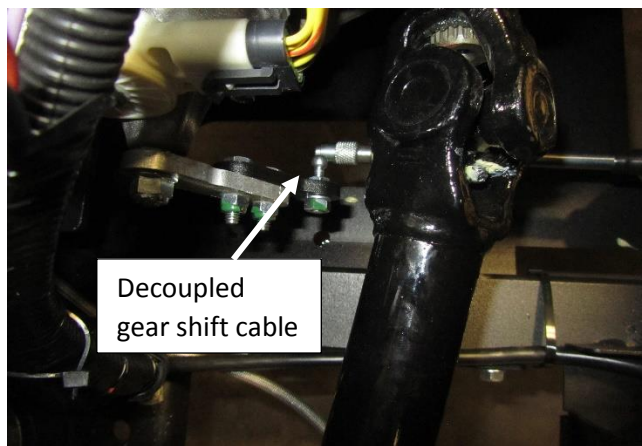


Adjusting Gear Shift Cable –Kohler 750 and Kohler 1000

Step 3 Cont. – Adjusting Rear Gear Shift Cable



Pull toward
passenger side



Decoupled
gear shift cable

Material:

Tools: 2 - 15/16" wrenches

3. To adjust the rear shift cable

- a) On the quick disc rod end of cable pull the knurled nob toward the passenger side to decouple as shown.

Note: Shifting to "High" position allows for easier decoupling.

- b) Using a 15/16" wrench loosen the 2 jamb nuts.

- c) Turn the cable to adjust to its *base setting* of 1/2".

Note: Increasing the length of cable (more exposed threads) allows for easier shifting to "Park" position. And vice versa for shortening the cable.

- d) Once adjusted attach the end of the cable and properly tighten the jamb nut.



Adjusting the Tailgate Latch

Step 1 – Adjusting the Tailgate Latch



Material:

Tools: 5/32" allen wrench

Safety:

- Place the UTV in Park on level ground and turn off the ignition.

Note: This procedure applies to all UTVs except those with Versa and Flat beds.

1. If the tailgate does not close tightly locate the latch on the loose side as shown.
2. With a 5/32" allen wrench loosen the 2 screws (but do not remove screws or latch will drop into tail gate) and move the latch as far forward toward the latch bolt as possible.
3. Tighten the 2 screws.
4. Check to see if moving the latch has taken out the slack and allows the tailgate to close properly.

Step 2 – Adjusting Tailgate Latch Post



Material:

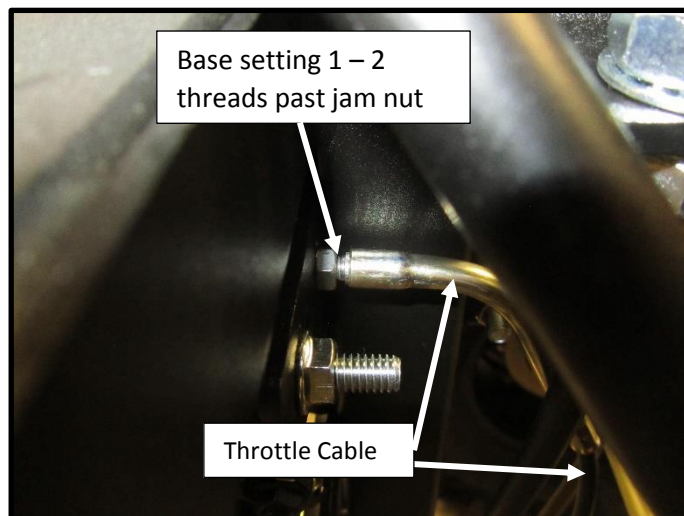
Tools: 1/2" socket and extension handle

1. If the tail gate latch still has too much play use a 1/2" socket and extension handle and place over the latch bolt as shown.
2. Bend the bolt slightly forward to front of UTV.
3. Verify that tail gate latch closes properly. If not repeat steps 1 – 2 above.



Adjusting Throttle Cable –Kohler 1000 (With Notes for Kohler 750 & Intimidator 800)

Step 1 – Adjusting Front Connection of Throttle Cable - Kohler 1000



Material:

Tools: 2 – 10 mm wrenches

Safety:

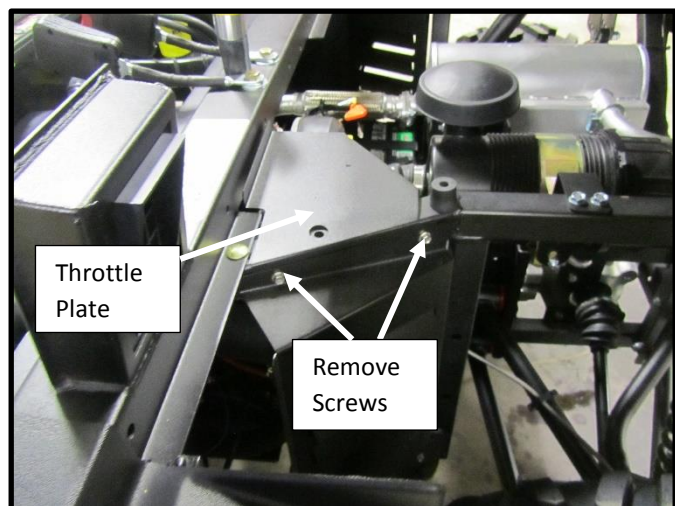
- Place the UTV in Park on level ground and turn off the ignition.

Note 1: When the throttle cable needs adjusting it is important to check and set the front and rear connections of the cable back to their *base settings*.

Note 2: The first 3 pages of this procedure address adjusting the throttle cable on the Kohler 1000. The last couple of pages address the Kohler 750 and Intimidator 800 throttle cable adjustments.

1. Locate the front connection to the throttle cable under the hood on the driver's side.
2. The *base setting* for the front connection is 1- 2 single thread exposed past the adjustment plate.
3. To adjust loosen the two jam nuts with 10 mm wrenches and turn cable to adjust.
4. Tighten jamb nuts after adjusting.

Step 2– Accessing the Rear Connection of Throttle Cable - Kohler 1000



Material:

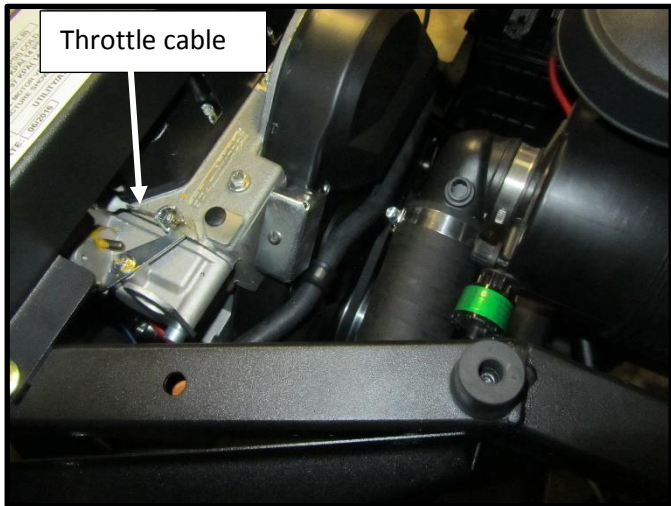
Tools: 3/8" socket

1. Raise bed and remove rear seat.
2. Remove 2 screws with 3/8" socket on the throttle plate and remove plate to locate rear connection of throttle cable to engine.



Adjusting Throttle Cable –Kohler 1000 (With Notes for Kohler 750 & Intimidator 800)

Step 2 Cont.– Accessing the Rear Connection of Throttle Cable - Kohler 1000

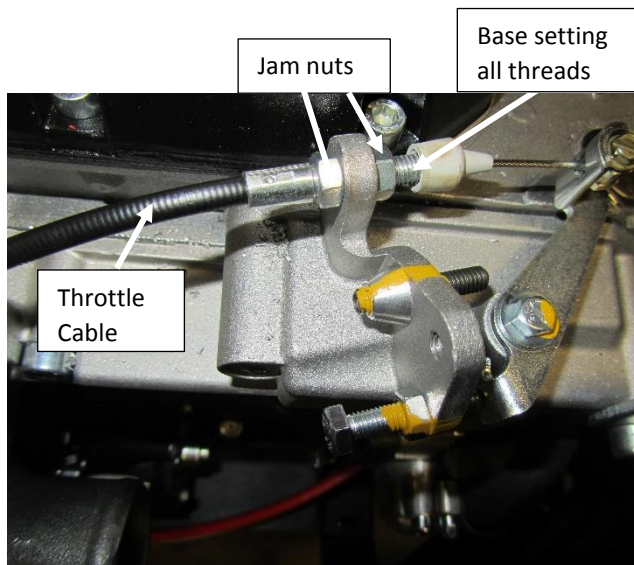


Material:

Tools:

View of rear connection of throttle cable with throttle plate removed.

Step 3 – Adjusting Rear Connection of Throttle Cable - Kohler 1000



Material:

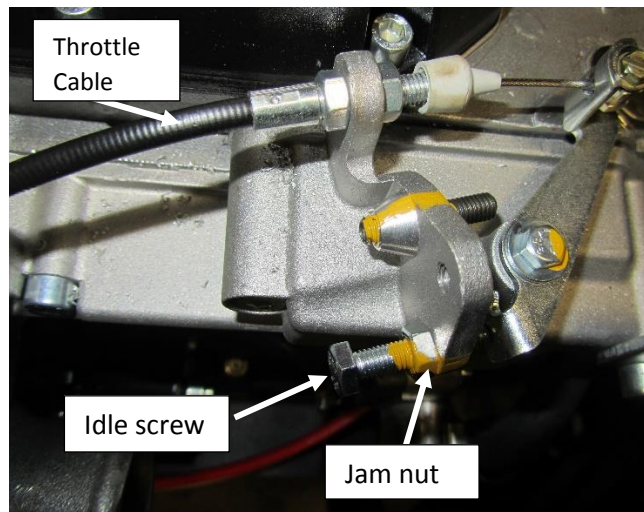
Tools: 2 – 10 mm wrenches

1. The *base setting* for the rear connection is for all threads to be exposed toward rear of UTV.
2. Loosen the 2 jam nuts with 10 mm wrenches.
3. Turn throttle cable to adjust to *base setting*.
4. Tighten the jam nuts.



Adjusting Throttle Cable –Kohler 1000 (With Notes for Kohler 750 & Intimidator 800)

Step 4 – Checking Engine Speeds - Kohler 1000



Material:

Tools: 2 – 10 mm wrenches,

1. To ensure Max RPM of 3600 can be reached start the engine with UTV in “Park”.
2. Rev engine to 3600 RPM.
3. If 3600 RPM cannot be reached turn ignition off then
 - a) Loosen jam nuts on the throttle cable with 2 - 10 mm wrenches.
 - b) Adjust cable to shorten it with 1 – 2 threads exposed toward front of UTV.
 - c) Repeat steps 1 - 3 until reaching Max RPM of 3600.
 - d) Tighten the jam nuts.

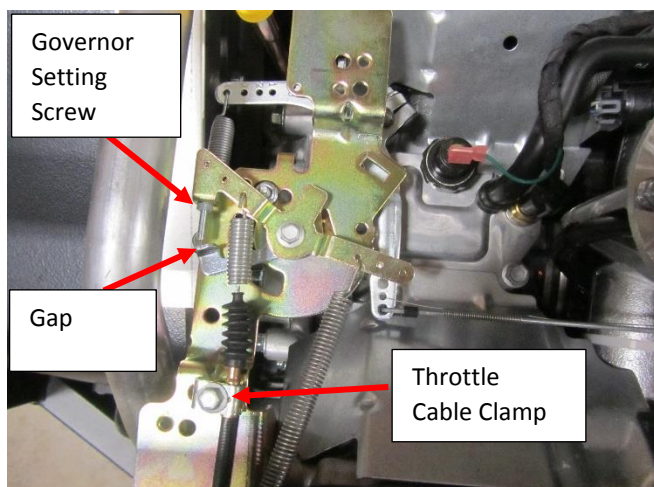
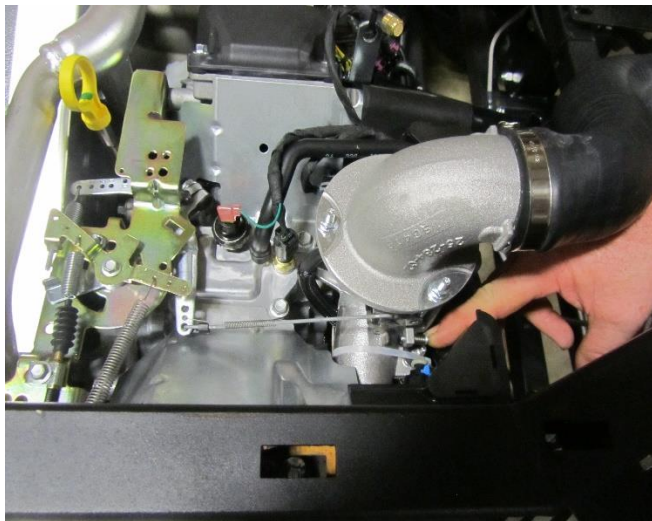
Note: If throttle cable is shortened too much then idle will be too high.

4. With UTV in Park start engine and check that idle is within 950 to 1000 RPM.
5. If not locate the idle screw and loosen jam nut with 10 mm wrench.
6. Adjust idle to 950 to 1000 RPM by screwing in idle screw to increase the idle speed and screwing out to decrease the idle speed.
7. Tighten the jam nut.
8. When speed settings are set within ranges turn off the ignition and reinstall the throttle shield.
9. Reinstall back seat.



Adjusting Throttle Cable –Kohler 1000 (With Notes for Kohler 750 & Intimidator 800)

Step 1 – Adjusting Idle Speed - Kohler 750



Material:

Tools:

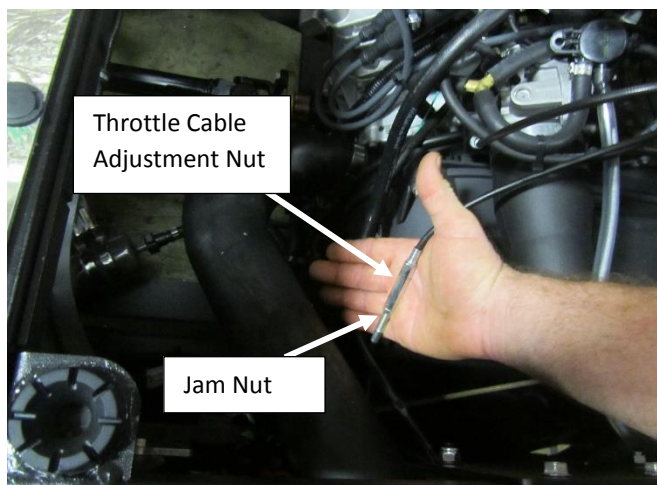
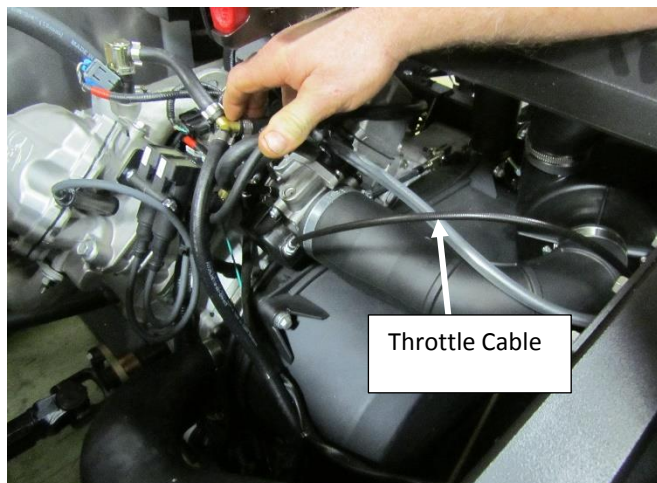
1. Under rear bed behind the driver's seat locate the idle base adjustment screw as shown in picture.
2. With the engine running adjust the idle speed to ~1000 RPM by turning the base adjustment screw. Turning clockwise increases the speed.
3. With the engine running at ~1000 RPM the gap as shown in picture should be ~1/16" to 1/8" to allow for the full range of the gas pedal motion. It should not be touching the plate. If needed adjust the gap by loosening the throttle cable clamp and moving the cable to provide the proper gap. Then tighten the clamp.

Note: It is **not** recommended that the governor setting screw be adjusted for this gap.



Adjusting Throttle Cable –Kohler 1000 (With Notes for Kohler 750 & Intimidator 800)

Step 1 – Adjusting Idle Speed – Intimidator 800



Material:

Tools: 10 mm wrench, pliers

1. Locate the throttle cable on the engine behind the driver's seat as shown.
2. Using a 10 mm wrench and pliers loosen the jam nut at the bottom of the adjustment nut as shown.
3. With the engine running turn the long adjustment nut to adjust the idle to ~1400 RPM. Lengthening the cable causes the engine to run faster.
4. When the idle is adjusted tighten the jam nut with a 10 mm wrench.



Installing Power Steering – Intimidator 800 / Kohler 1000

Step 1 – Remove Existing Steering Shaft



Material:

Tools: Jack, Jack Stand, Air Ratchet, Wrench

Safety:

- Park the vehicle on level ground and place the shifter in park.
- Remove the ignition key.
- Chock one of the rear tires and use a jack stand to support the UTV during this whole procedure.

1. For easier access to Power Steering Unit bracket and for routing the wiring to the battery remove the front wheel on the driver's side and the fender well behind this wheel.

Step 1 Continued – Remove Existing Steering Shaft

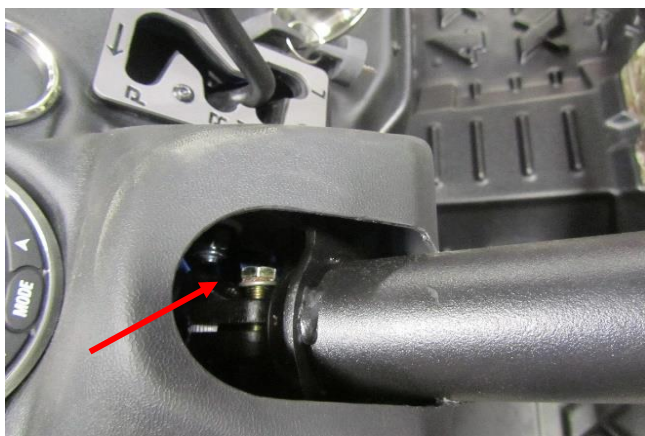


Material:

Tools: 1/2" Wrench

2. Remove the 5/16" bolt and nut on the tilt steering gas spring. Keep bolt and nut for reinstallation.
3. Lower both steering column and tilt spring to horizontal position. This allows access to top shaft collar on the steering shaft.

Step 1 Continued – Remove Existing Steering Shaft



Material:

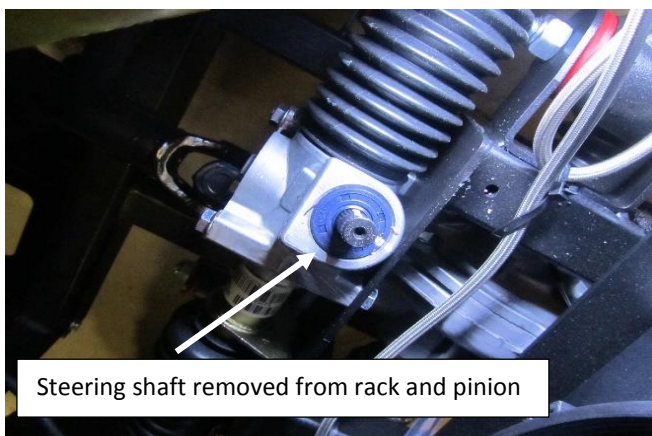
Tools: 1/2" Wrench

4. Through the access hole above the steering column remove the 5/16" bolt and nut holding the shaft collar to the top of the steering column. Keep bolt and nut for reinstallation.



Installing Power Steering – Intimidator 800 / Kohler 1000

Step 1 Continued – Remove Existing Steering Shaft



Material:

Tools:

5. Pull the steering wheel out per picture to disconnect from top of steering shaft.
6. Remove the bolt holding the shaft collar on the lower end of the steering shaft. Keep bolt for reinstallation.
7. Pull steering shaft free from the rack and pinion.
8. Pull steering shaft out through the access hole on top of steering wheel

Step 2- Preparing for Power Steering Unit Installation



Material: E-Steer Kit 8053070, Mounting Bracket

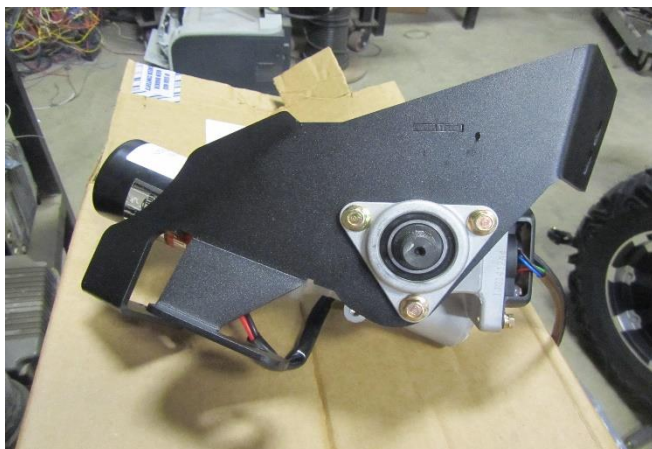
Tools:

1. Open the package and note that the main parts include:
 - Power Steering Unit with input and output shafts and 2 plug connectors
 - 2 steering shafts – a lower (shorter) shaft and an upper (longer) shaft
 - a sleeve with bearing and 3 mounting holes
 - Control Module with two plug connectors, 2- 10 AWG power leads, and 4- 14 AWG wires
 - 2 – 30 amp fuses with fuse holder
 - Miscellaneous hardware



Installing Power Steering – Intimidator 800 / Kohler 1000

Step 2 Cont. - Preparing for Power Steering Unit Installation

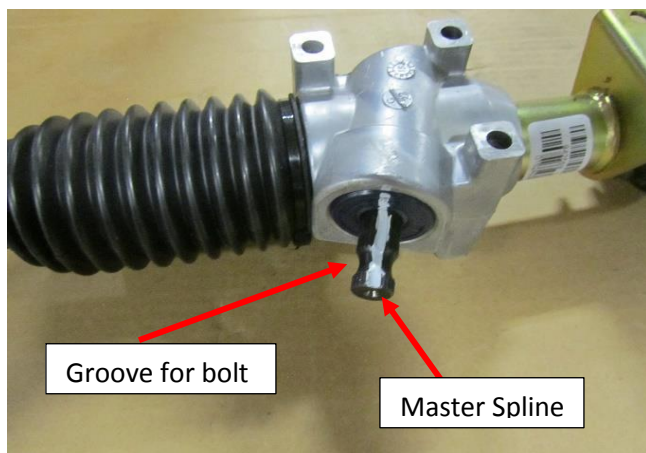


Material: Power Steering Unit, sleeve with 3 screws, thread lock compound
Tools: 10 mm wrench

2. Position the sleeve to the mounting bracket and to the power steering unit with the 3 bolts provided. Use a thread lock compound and tighten with a 10 mm wrench.

Note: The shaft of the power steering unit on the bracket side is the Input Shaft and will mount to the upper shaft that goes to the steering wheel.

Step 3 – Installing upper and lower shafts



Material: Upper and Lower Steering Shafts
Tools:

Note 1: During this step only install bolts *loosely* on the shaft collars on upper and lower shafts to allow movement for installing shafts and Power Steering Unit. All bolts will be tightened later with a wrench and a thread lock compound.

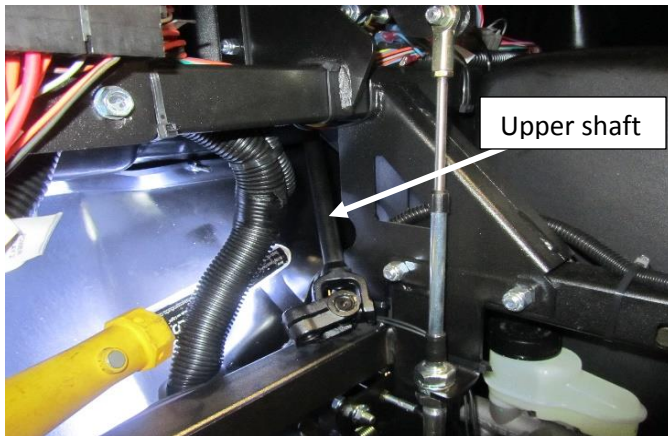
Note 2: The collars on both shafts are end specific and will only fit one way. Both ends of the lower shaft have a master spline (flat surface) for mating up to the master splines of power steering unit output shaft and the rack and pinion connection. If the collar does not slide on easily check the size and slot location on both parts and try again. **DO NOT FORCE** the collar.

Note 3: Both ends of the upper shaft (longer one) and the upper end of the lower shaft have different type bolt holes in the collar. One hole is not threaded and designed as the entry hole for the bolt with the other hole being threaded that the bolt will screw into.



Installing Power Steering – Intimidator 800 / Kohler 1000

Step 3 Continued – Installing upper and lower shafts



Material: Upper and Lower Steering Shafts

Tools: 17 mm wrench, 13 mm wrench

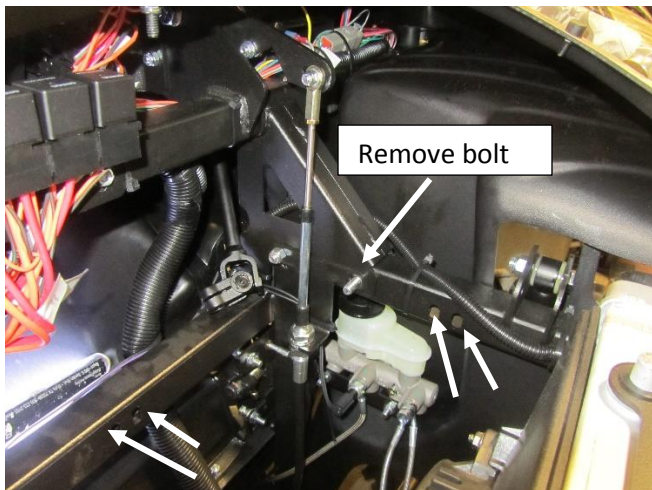
1. Mount the correct end of the shorter shaft to the rack and pinion. Install bolt and nut and tighten loosely at this point. Line the bolt in the collar with the groove on the connection for proper installation. Pull on lower shaft lightly to confirm that it is properly attached to the rack and pinion.

Note: See picture of rack and pinion connection location in Step 1.

2. Determine which end of upper shaft mates onto the steering column and route through engine compartment to the steer column access hole as shown in step 1.

Note: This step requires two people. One to hold the upper steering shaft in position from the compartment area while the other person directs and attaches the upper end to the steering column using the bolt and nut from the previous shaft. Do not tighten at this point.

Step 4 – Mount Power Steering Unit



Material: 3/8" bolt with flat washer and nylock nut

Tools: 9/16" wrench, wrench

1. Locate mounting holes for the power steering bracket as shown by arrows in picture.
2. Using 9/16" wrench remove and discard the bolt shown in the picture.



Installing Power Steering – Intimidator 800 / Kohler 1000

Step 4 Continued – Mount Power Steering Unit



Material: 3/8" X 3" bolt, 3/8" flat washer, nylock nut

Tools: 9/16" wrench

3. Loosely install bracket and power steering unit with one 3/8" bolt, flat washer, and nylock nut through location where bolt was previously removed in this step. Do not tighten at this point.

Note: This will allow assembly to swivel when installing steering shafts.

Step 5 – Attaching Shafts to the Power Steering Unit

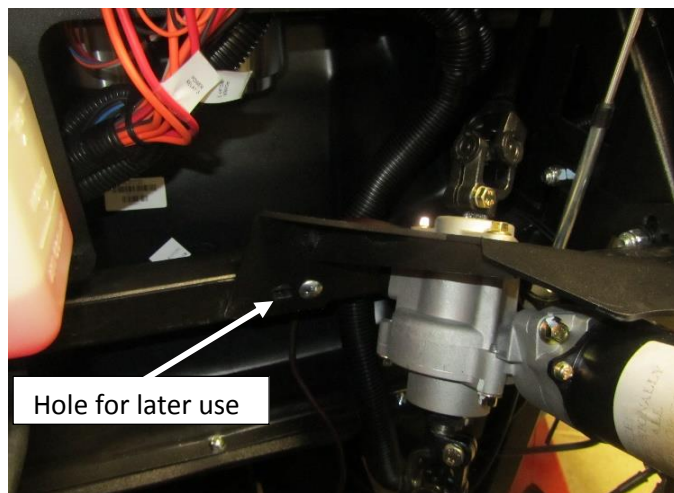


Material: bolts supplied with steering shafts, 3- 3/8" X 2-1/2" carriage bolts with washers and nylock nuts, thread lock compound

Tools: 13 mm wrench, 17 mm wrench

1. Install lower shaft to power steering unit's output shaft. Do not tighten at this point.
2. Install upper shaft to power steering unit's input shaft. Do not tighten at this point.
3. Once both shafts are properly connected secure the bracket using carriage bolts with flat washers and nylok nuts. Two bolts will attach to frame on side rail and one bolt to rear rail. Tighten these 3 bolts along with bolt in step 4 above.

Note: One bolt will be added to the rear rail bracket later to secure the Control Module.

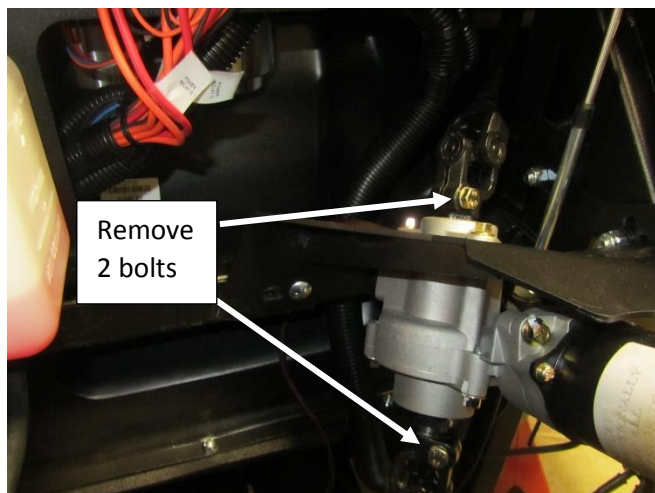


Hole for later use



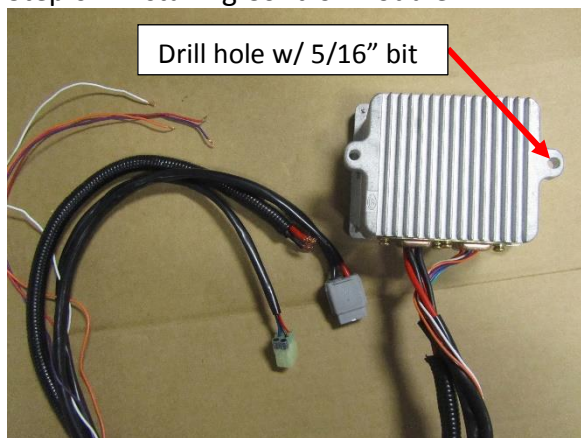
Installing Power Steering – Intimidator 800 / Kohler 1000

Step 5 Continued– Attaching Shafts to the Power Steering Unit



4. Tighten bolts on shaft connections:
 - Remove bolt from upper shaft collar on the input shaft. Add lock compound and tighten with 13 mm wrench.
 - Remove bolt from lower shaft collar on the output shaft. Add lock compound and tighten with 13 mm wrench.
 - Rotate steering wheel to access lower shaft collar connection to rack and pinion. Remove nut. Do not remove bolt. Add lock compound to bolt and attach nut and tighten with 17 mm wrench.
 - Without removing bolt or nut on upper shaft collar to steering column add lock compound to exposed threads and tighten.
5. Reattach the tilt steering gas spring to the steering column using its bolt and nylock nut.

Step 6 – Installing Control Module



Material:

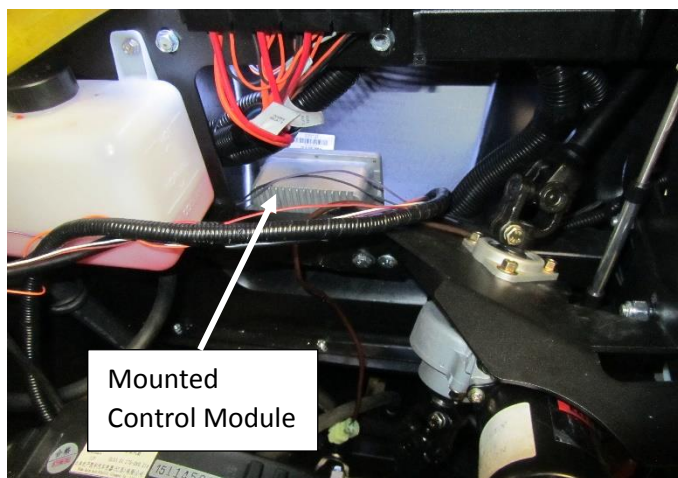
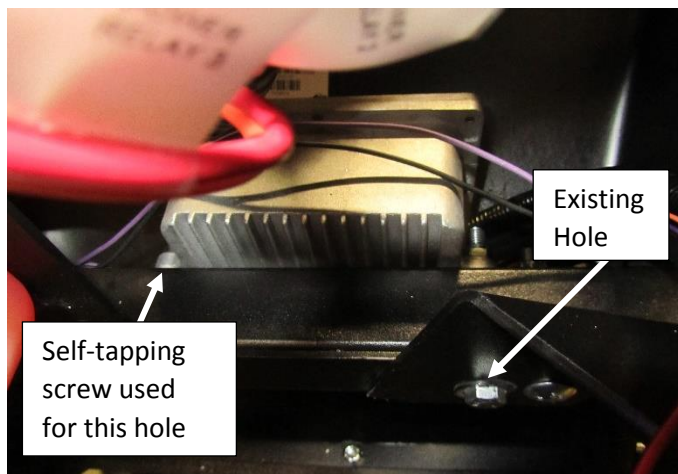
Tools: 5/16" drill bit and electric drill

1. Place the control module face down on cardboard and enlarge the existing hole on the right ear to 5/16" diameter using an electric drill.



Installing Power Steering – Intimidator 800 / Kohler 1000

Step 6 Continued – Installing Control Module

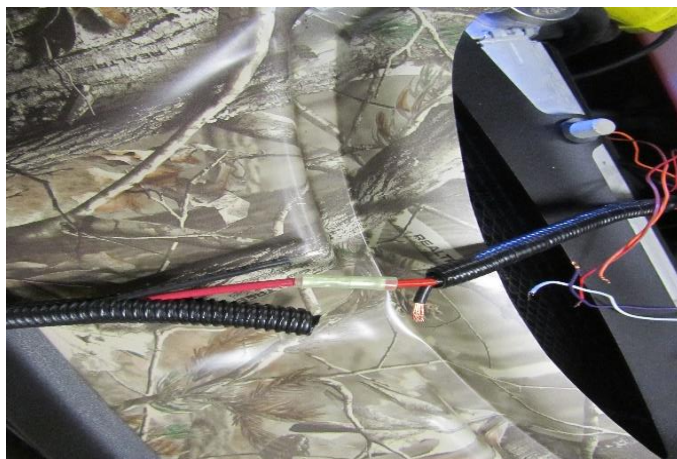


Material: 1 - 5/16" X 2-3/4" bolt, 5/16" flat washer and unlock nut. 1 – 1/4" X 1" self-tapping screw
Tools: 1/2" wrench, air ratchet with 7/16" socket

2. Mount the Control Module as shown in picture with a 5/16" X 2-3/4" bolt with flat washer and nylock nut through the enlarged mounting hole. Use the remaining hole on the Power Steering bracket.
3. Using a 1/4" X 1" self-taping screw and air ratchet attach the other side of the control module.

Note: Two people can best accomplish this. The cup holders in the dash can be removed for sight access and direction during this step.

Step 7 – Wiring Control Module to Battery



Material: 7' each of black and red 10 AWG wire, 7' of 1/2" wire protector, electrical tape, electrical butt connectors

Tools: Utility knife, wire stripper and crimper

1. Attach 7' piece of red wire to red lead from Control Module using butt connector and crimp.
2. Do the same with the 7' black wire tying into the black lead from the Control Module.

Note: The Diesel will require 9' of 10 AWG red and black wire due to battery being further back on vehicle.



Installing Power Steering – Intimidator 800 / Kohler 1000

Step 7 Continued – Wiring Control Module to Battery

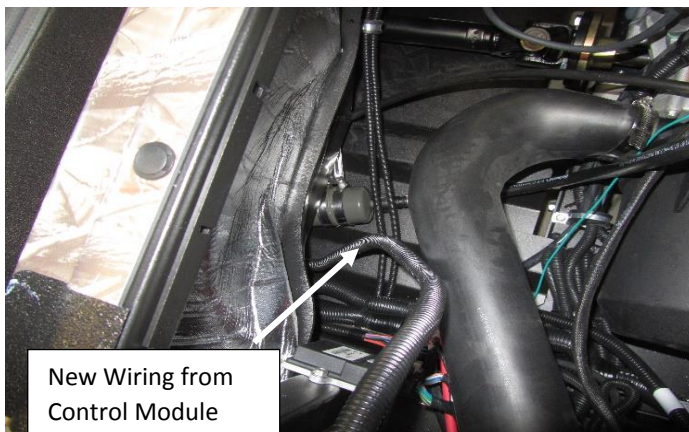


3. Insert wires into cable protector and tape with electrical tape.



4. Route wiring from front compartment under driver's seat and to outside of fuel pump under rear seat as shown.

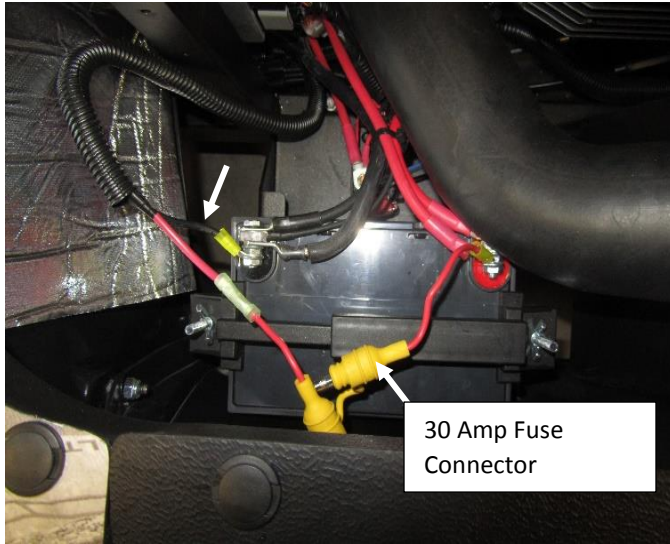
Note: Both front and rear seats need to be removed for this step.





Installing Power Steering – Intimidator 800 / Kohler 1000

Step 7 Continued – Wiring Control Module to Battery



Material: 2 – 1/4" eyelet electrical connections, butt electrical connectors, 30 amp holder from E-Steer kit.

Tools: Utility knife, 1/4" wrench

5. Cut off excess black wire and protector and attach 1/4" eyelet to wire. Connect eyelet to end of screw on negative battery post and tighten with an additional nut.

Note: The Diesel model uses a 5/16" screw on its battery posts.

6. Cut off excess red wire and attach to the 30 amp fuse connector. Add a 1/4" eyelet to the end. **Remove fuse** and connect eyelet to end of screw on positive battery post and tighten with an additional nut.

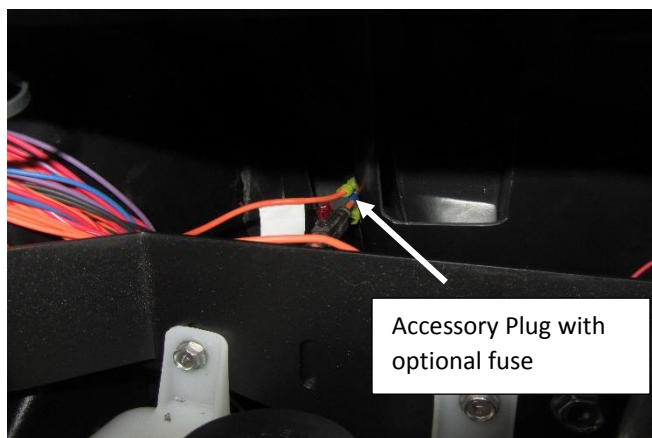
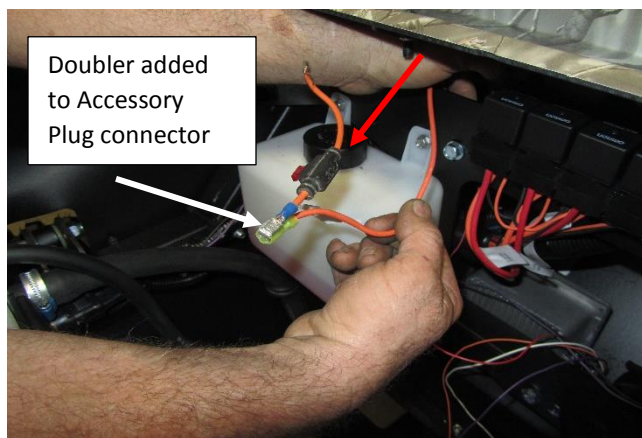
Safety: Do not install fuse until all electrical connections have been made and the power steering is ready to be tested.

7. Secure wiring to battery with cable ties to frame every 18" – 24" where possible.



Installing Power Steering – Intimidator 800 / Kohler 1000

Step 8 – Installing LED



Material: 3' each of black and red 14 AWG wire, 1' of red 14 AWG wire, 2 sets of male/female connectors, 1 doubler connector, butt connectors, OPTIONAL – 1 – 10 amp fuse and holder

Tools: 1/2" drill bit, electrical drill, wire remover and crimper

1. Drill 1/2" hole to the left of steering column as shown through dash and hood.
2. Attach the male and female connectors to both ends of the 3' long red and black wires pieces and to the ends of the LED red and black wires.

Note: These connectors allow for easy removal of dash in future.

3. Connect the red to red and black to black male/female connectors and route wiring through the 1/2" hole as shown. Push the LED in the hole until it snaps in place.
4. Connect the black wire from the LED to the orange wire from the control module (not shown in picture).
5. The LED light will be powered by the Accessory Plug in the dash (key on power). Remove the existing connector to the Accessory plug. Add a doubler connector to the Accessory Plug connection to allow tying in the LED.
6. Twist the red wire from the LED and small red wire from the control module together and place in one end of a butt connector and crimp.
7. Add the appropriate connectors to a 12" section of 14 AWG red wire and attach one end to the pair of twisted red wires and attach the other end to the doubler connector for the Accessory plug.

Note: A 10 amp fuse can be added for additional protection between the Accessory plug and the red wires if desired as shown in the picture.

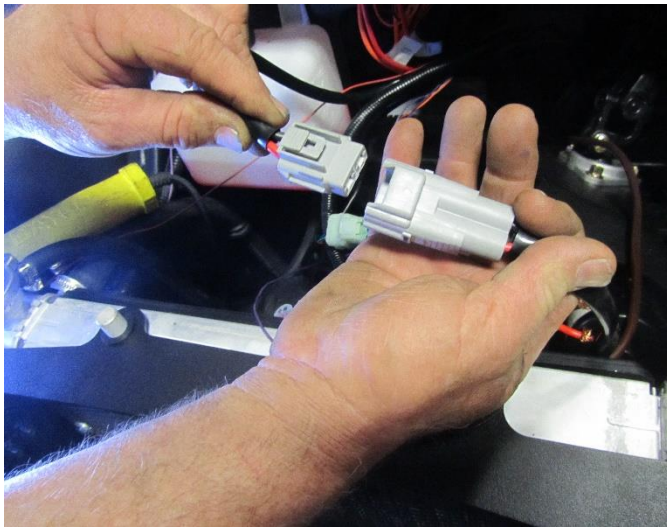


Installing Power Steering – Intimidator 800 / Kohler 1000

Step 8 Continued – Installing LED

8. Attach the Doubler connector back to the Accessory plug.

Step 9 – Completing the job



Material: 2 female connectors
Tools: Wire stripper and crimper

1. Connect the two plugs from the Power Steering Unit to the two corresponding plugs from the Control Module.

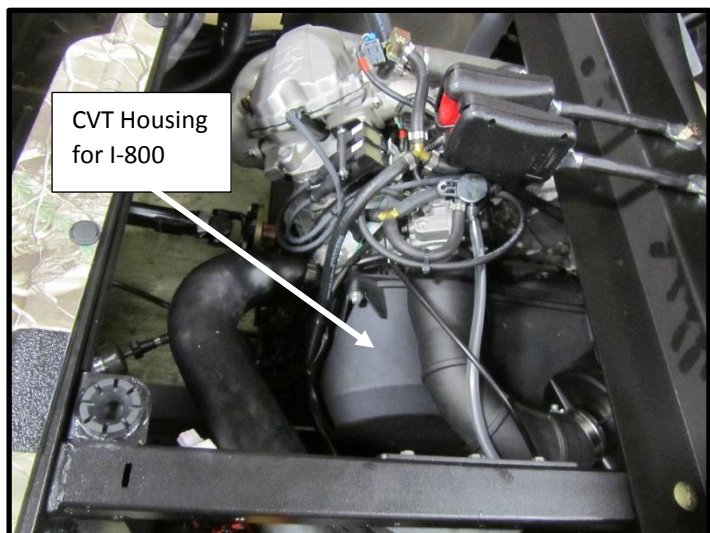
Note: These plugs can only fit one way.
2. Connect single female connectors to the small white and purple wires from the Control Module and position them so they are out of way but accessible.

Note: These will be used for diagnostics in the future.
3. Connect the 30 amp fuse at the battery. Turn ignition on and verify that LED comes on. It will stay on about 5 seconds.
4. Secure wiring inside the compartment safely away from steering linkages with cable ties.
5. Replace the rear and driver's seats, the fender well, and the front wheel.
6. Lower UTV to the ground and start engine. Operate the UTV to ensure the power steering is operating properly.



Removing CVT Belt and CVT Clutches – Kohler 1000, Kohler 750, and Intimidator 800

Step 1 – Accessing the CVT



Material:

Tools: push pin puller, 7/16" wrench, 5/32" allen wrench, 5/16" socket

Safety:

- Place the UTV in Park on level ground and turn off the ignition.

Note 1: This procedure applies to all three UTV models even though most of the pictures used are for the Kohler 1000. Significant differences between the models are pointed out.

Note 2: This procedure uses the terminology of Primary Clutch as the Drive Clutch and Secondary Clutch as the Driven Clutch.

1. Remove the front seat and locate the CVT plastic housing under the front seat as shown.

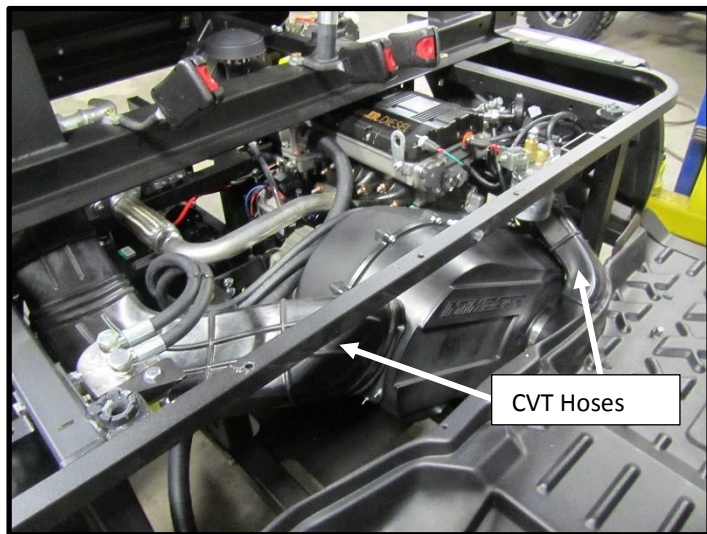
Note: The Intimidator 800's CVT is located toward the outside on the driver's side due to its engine orientation. The primary clutch is in front closest to the driver.

2. Pull the 6 plastic push pins on top of the kicker panel as shown.
3. Using a 7/16" wrench and a 5/32" allen wrench remove the 5 bolts on the front of the panel and then take out panel.



Removing CVT Belt and CVT Clutches – Kohler 1000, Kohler 750, and Intimidator 800

Step 1 Cont. – Accessing the CVT

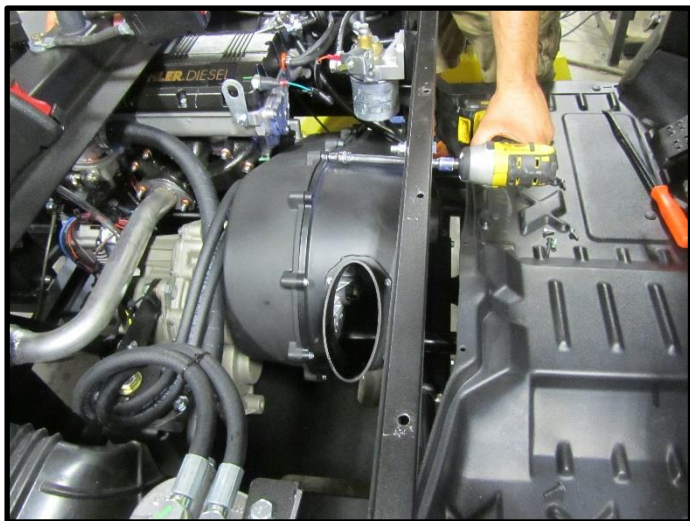


Material:

Tools: 5/16" socket

4. Using a 5/16" socket remove the bolts of the band clamps where the two CVT hoses attach to the CVT cover.
5. Fold the hoses back out of the way.

Step 2 – Removing CVT Cover and Belt



Material:

Tools: 5/16" socket, clutch spreader wrench

1. Using a 5/16" socket or wrench remove the bolts on the front of CVT cover.

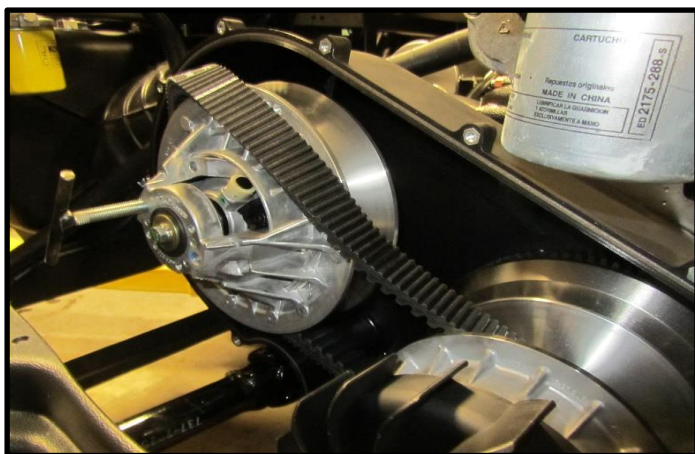
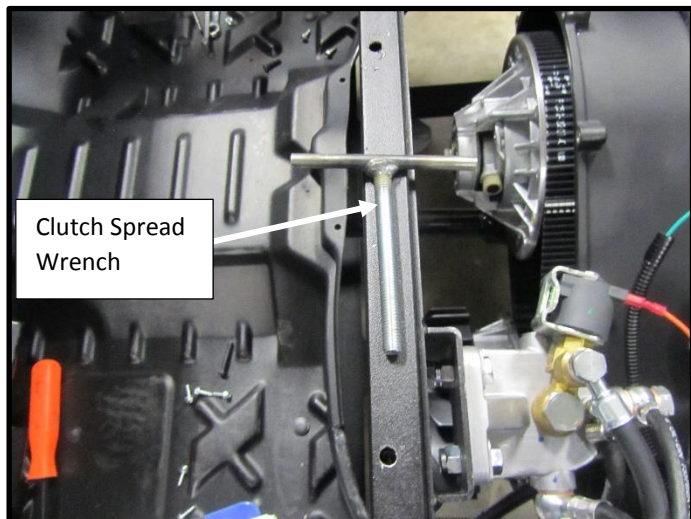
Note: The bottom bolts will have to be accessed from bottom of UTV. Remove the skid plate to do this.

2. Pull front of CVT cover out toward passenger side.



Removing CVT Belt and CVT Clutches – Kohler 1000, Kohler 750, and Intimidator 800

Step 2 Cont. – Removing CVT Cover and Belt

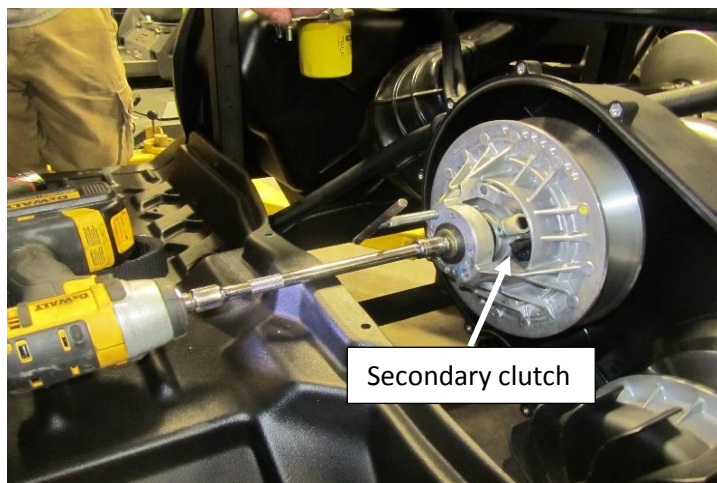


3. For CVT belt removal use the clutch spreader wrench to separate the secondary clutch by screwing the wrench in clockwise until belt is loosened as shown.

Note: This tool can be made by welding a Tee handle to a 4" piece of 10 mm all thread or purchased from Intimidator.
Part # 793-5008-00.

4. Roll the belt off.

Step 3 – Removing and Replacing a Secondary Clutch



Material:

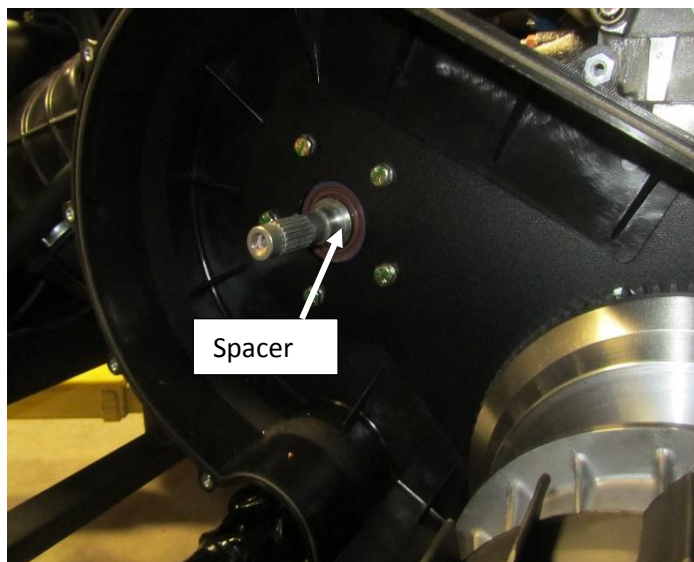
Tools: 1/2" socket

1. To replace the secondary clutch
 - a) Using a 1/2" socket remove the nut on the secondary clutch as shown.
 - b) Grab the secondary clutch with both hands and pull off.



Removing CVT Belt and CVT Clutches – Kohler 1000, Kohler 750, and Intimidator 800

Step 3 Cont. – Removing and Replacing a Secondary Clutch

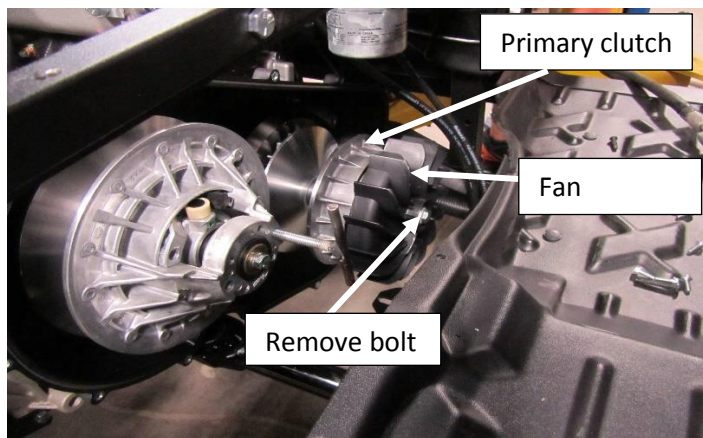


- c) To install the secondary clutch place it on the transmission shaft and tighten the nut.

Note 1: Be sure the spacer stays in place on the transmission shaft before installing clutch.

Note 2: Use Lock Tite on the clutch nut before installing.

Step 4 – Removing and Replacing Primary Clutch



Material:

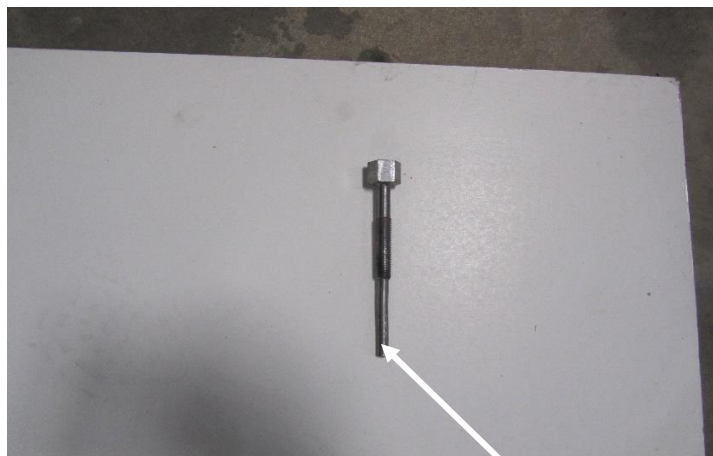
Tools: 11'16" socket

1. To replace the Primary clutch use an 11/16" socket to remove bolt and fan together from the primary clutch as shown.

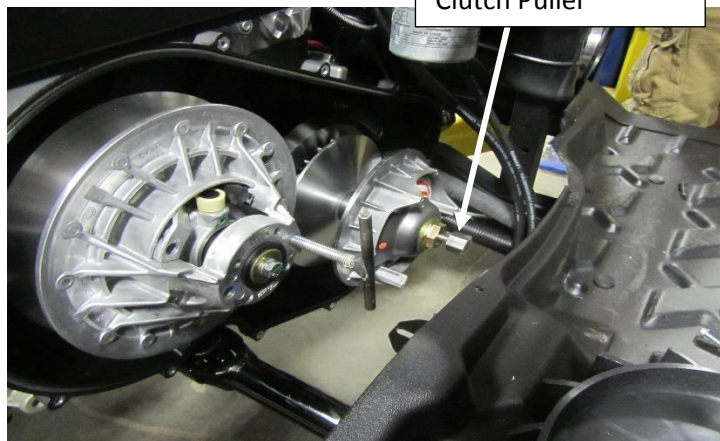


Removing CVT Belt and CVT Clutches – Kohler 1000, Kohler 750, and Intimidator 800

Step 4 Cont. – Removing and Replacing Primary Clutch



Clutch Puller



Material:

Tools: clutch puller, 7/8" socket, 11/16" socket

2. Insert the drive clutch puller in center of primary clutch.

Note: The clutch puller can be purchased from the manufacturer and is Intimidator Part # 770-1036-00 for use on the Kohler 750 and Kohler 1000 models. The clutch puller for Intimidator 800 does not have a PN and is ordered by just its name.

3. Tighten the drive clutch puller with a 7/8" socket until primary clutch pops off.
4. Pull off the primary clutch.
5. Remove the puller from the primary clutch.
6. Install primary clutch onto shaft.
7. Using an 11/16" socket install bolt and fan and tighten.

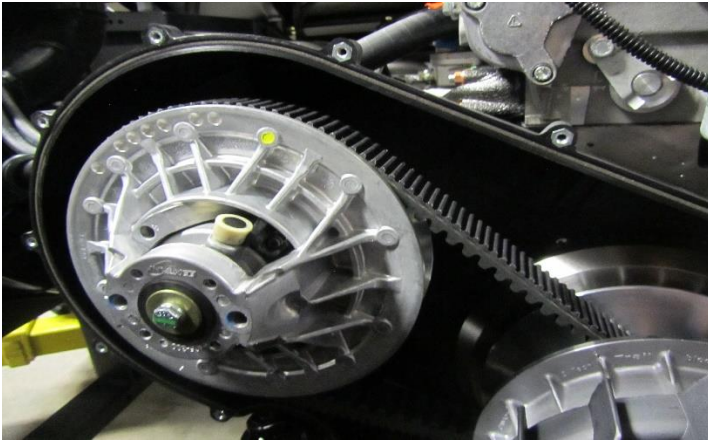
Note 1: Later in this procedure the fan and bolt will be removed for installation of CVT cover for the Kohler 750 and Kohler 1000 models. Lock Tite will be added to the bolt after the installation of the fan the second time.

Note 2: Add Lock Tite to the bolt at this time for the Intimidator 800.



Removing CVT Belt and CVT Clutches – Kohler 1000, Kohler 750, and Intimidator 800

Step 5 – Installing CVT Belt and Checking Secondary Clutch



Material:

Tools: clutch spreader wrench, 11/16" socket

1. Install a new CVT belt (part # 741-1002-00 for the Kohler 1000).
 - a) Roll belt back on over the clutches similarly as belt was removed.
 - b) Remove the clutch spreader wrench from the secondary clutch by screwing it out.
 - c) With CVT cover off and hoses and any other items clear of CVT area and with UTV in park, start the engine. Rev it up a few times to tighten the CVT belt.

Note 1: For the Kohler 750 and Kohler 1000 the secondary clutch should not rotate when engine is in idle. If it does rotate then the shim on transmission shaft will need adjusting. Contact Intimidator for adjusting and/or additional shims.

Note 2: The secondary clutch on the Intimidator 800 needs to rotate slightly for proper shifting. Call Intimidator with questions.

Step 6 – Install CVT Cover and Complete Work

Material:

Tools: 11/16" socket

1. For the Kohler 750 and Kohler 1000 remove the primary clutch bolt and fan using an 11/16" socket.

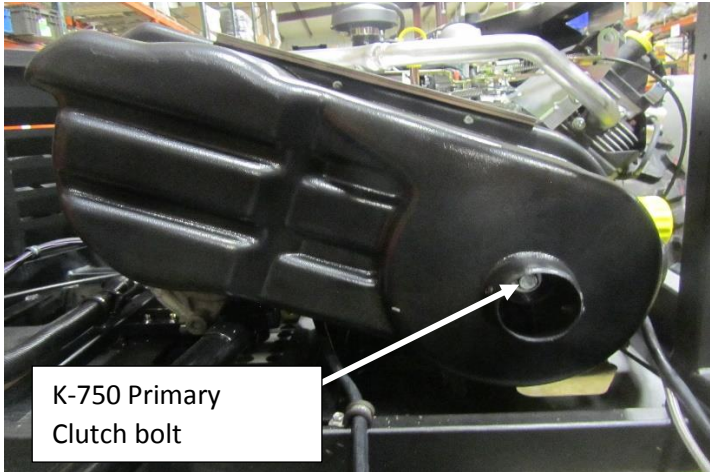
Note 1: The bolt and fan are removed for easier positioning of CVT cover on the Kohler models.

Note 2: The Intimidator 800 does not have space restrictions as the two Kohler models do. The CVT cover can be installed and tightened with its bolts at this time without removing fan.



Removing CVT Belt and CVT Clutches – Kohler 1000, Kohler 750, and Intimidator 800

Step 6 Cont. – Install CVT Cover and Complete Work



Material:

Tools: 11/16" socket, 5/16" socket

2. Make sure the o-ring in the CVT cover is in good shape and properly in place before installing the cover. Replace CVT o-ring (part # 712-3012-00 for Kohler 1000) if necessary. The Kohler 750 does not have an o-ring.
3. For the Kohler 750 and Kohler 1000 position the CVT cover in place (tight fit).
4. After CVT cover is in position but not yet attached slip the fan inside the cover and onto the primary clutch.
5. Add Lock Tite to the primary clutch bolt and install into the fan and primary clutch through the opening in the CVT cover.
6. Tighten the bolt using an 11/16" socket through the CVT cover opening as shown.
7. After installing the CVT cover add bolts and tighten with 5/16" socket or wrench.
8. Reattach the two CVT hoses to the CVT cover and tighten the bolts on the belt clamps.
9. Install the skid plate on bottom of UTV.
10. Install the kicker panel.



Removing Rear Half Shaft – Kohler 750, Intimidator 800, and Kohler 1000

Step 1 – Removing Rear Tire



Material:

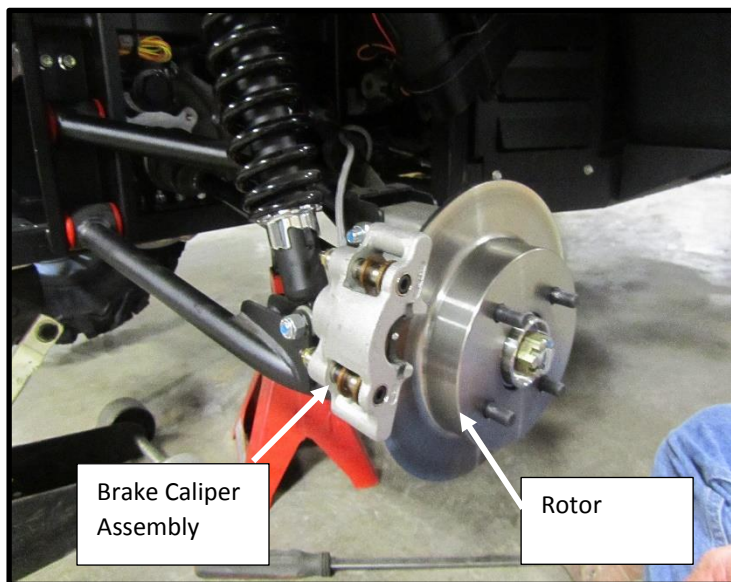
Tools: 17 mm socket

Safety:

- Place the UTV in Park on level ground and turn off the ignition.
- To access the rear half shaft use a lift or jack along with jack stands.

1. Remove the hub cover.
2. Using a 17 mm socket remove the 4 lug nuts and then the wheel.

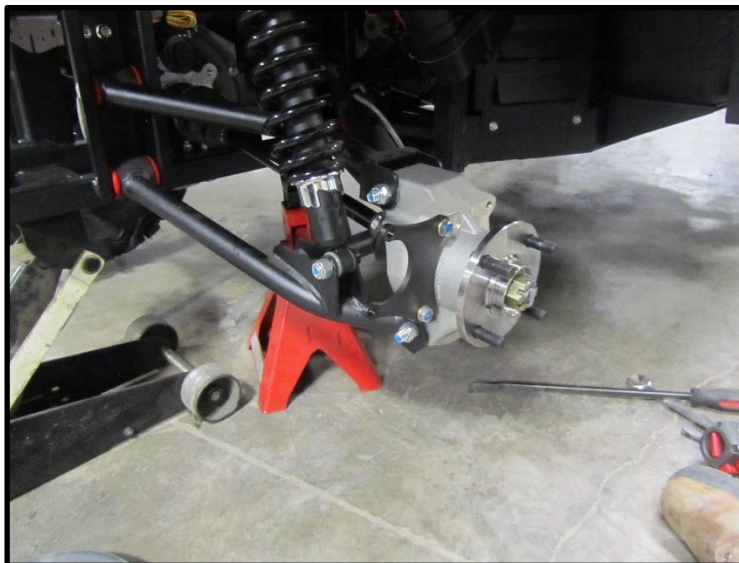
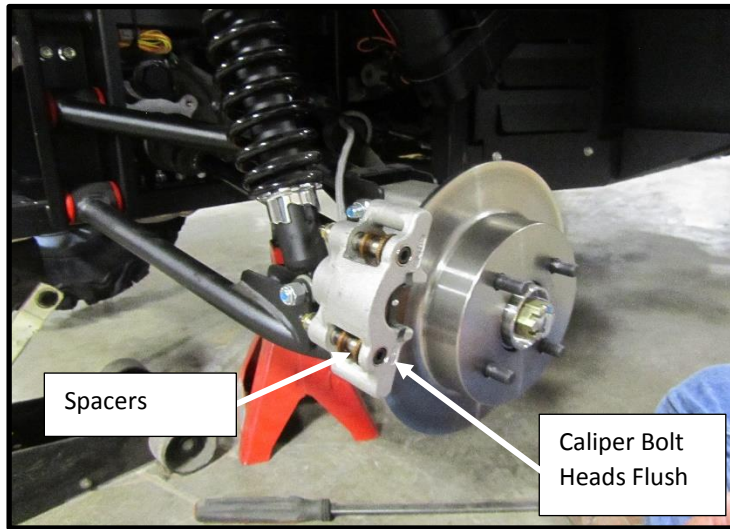
3. Locate the rear suspension as shown.





Removing Rear Half Shaft – Kohler 750, Intimidator 800, and Kohler 1000

Step 2- Removing Brake Caliper Assembly



Material:

Tools: 13 mm socket or wrench, 7 mm allen wrench

1. Using a 13 mm wrench or socket and a 7 mm allen wrench remove the two nuts and bolts from the caliper.

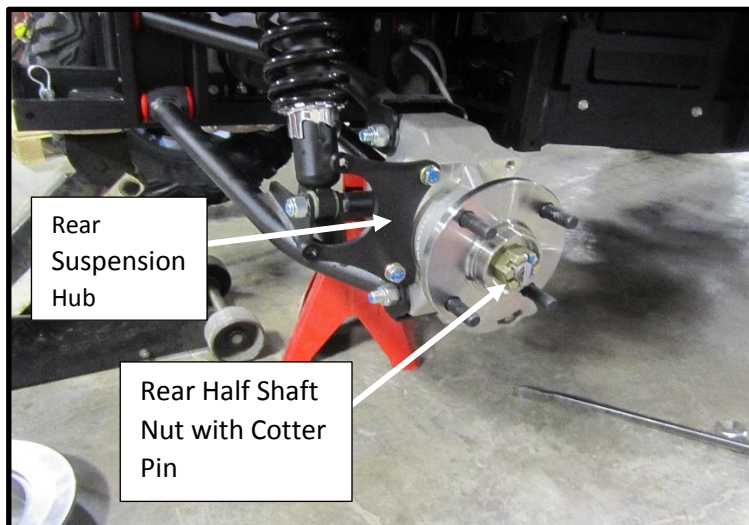
Note: The two spacers for each bolt are different with the front spacers being countersunk to allow the bolt heads to be flush with surface of the caliper.

2. Move the caliper back out of the way.
3. Remove the rotor.



Removing Rear Half Shaft – Kohler 750, Intimidator 800, and Kohler 1000

Step 3 – Removing Independent Rear Suspension Hub



Material:

Tools: Pliers, 1-1/8" socket, 1/2" socket, 3/4" socket

1. Remove cotter pin from rear half shaft nut.
2. Using a 1-1/8", 1-3/16" or a 1-1/4" socket remove the nut.

Note: Different size sockets are required for the different models.

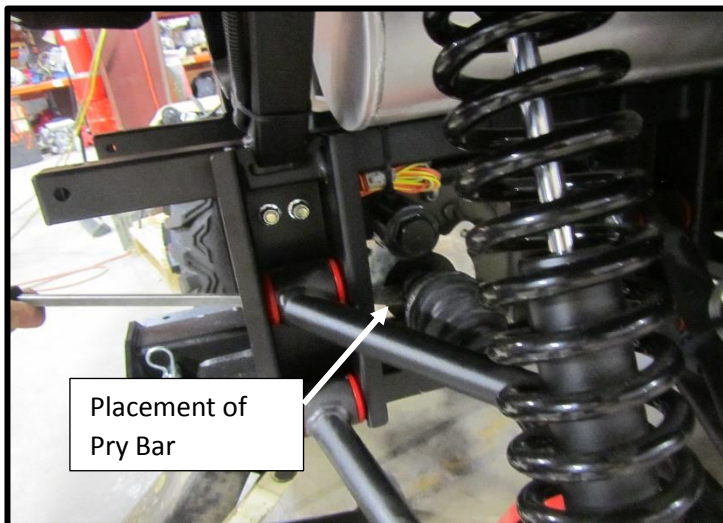
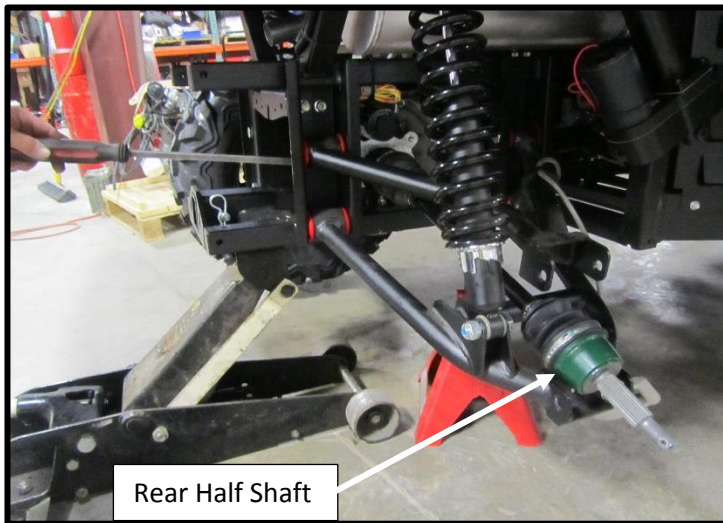
3. Using a 1/2" socket/ wrench remove the lower bolt from the independent rear suspension hub as shown.
4. Using a 3/4" socket / wrench remove the top bolt from the suspension hub.
5. Take off the independent rear suspension hub and lay it to the side.

Note: Different size bolts and different lengths.



Removing Rear Half Shaft – Kohler 750, Intimidator 800, and Kohler 1000

Step 4 – Removing the Rear Half Shaft



Material:

Tools: Pry Bar

1. Using a pry bar separate the rear half shaft from the rear differential.
2. Complete removal by pulling out the half shaft using your hands.

Step 5 – Installing a Rear Half Shaft



Material:

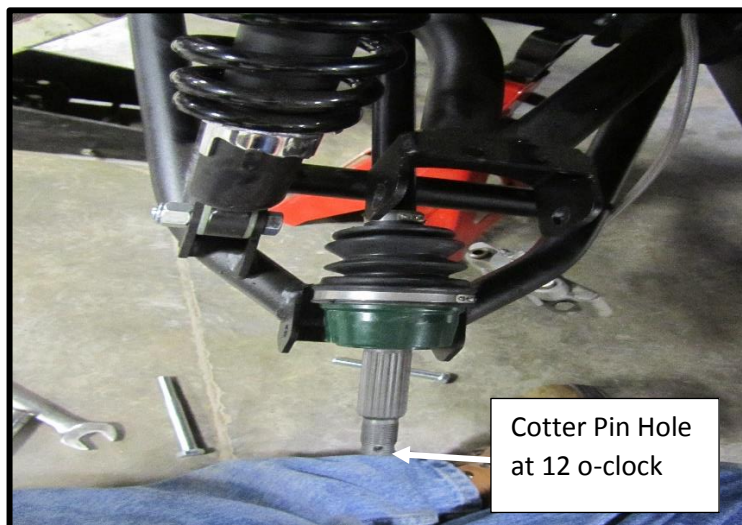
Tools:

1. Before installing the half shaft inspect the male spline and its snap ring. Replace snap ring as needed.
2. Cover the male spline of the half shaft with an anti-seize compound.



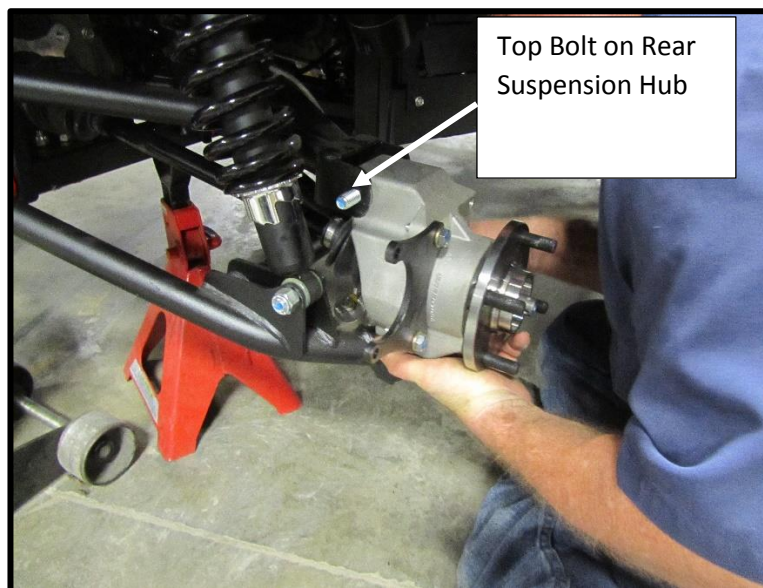
Removing Rear Half Shaft – Kohler 750, Intimidator 800, and Kohler 1000

Step 5 Cont. – Installing a Rear Half Shaft



3. Insert half shaft into rear differential until snap ring locks in place. Align cotter pin hole at the 12 o'clock position to allow for cotter pin to miss 4 lug bolts as shown.

Step 6 – Installing Rear Suspension Hub



Material: New Cotter Pin

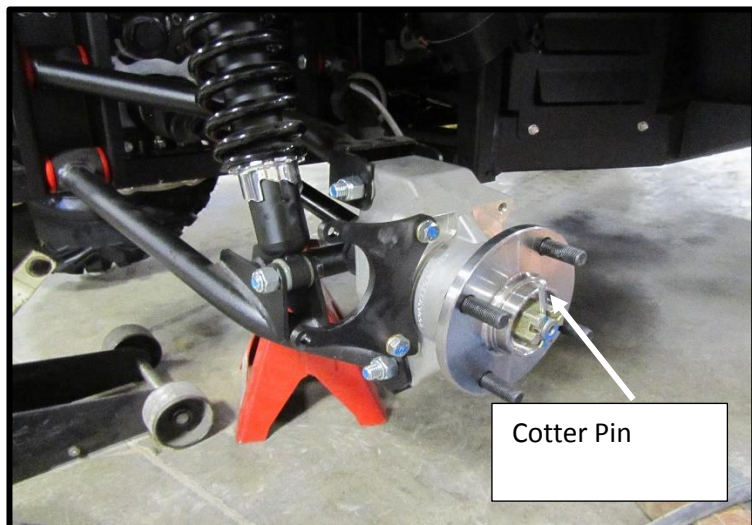
Tools: Pliers, 1-1/8" socket, 1/2" socket, 3/4" socket

1. Install rear suspension hub by inserting the shorter bolt on top and longer bolt on bottom.
2. Tighten top bolt and nut with 3/4" socket / wrench and bottom bolt and nut with a 1/2" socket / wrench.



Removing Rear Half Shaft – Kohler 750, Intimidator 800, and Kohler 1000

Step 6 Cont. - Installing Rear Suspension Hub



3. Install and tighten the rear half shaft nut.
4. Then insert a *new* cotter pin. Bend the ends of the cotter pin back out of the way.

Step 7 – Installing Rotor and Caliper Brakes



Material:

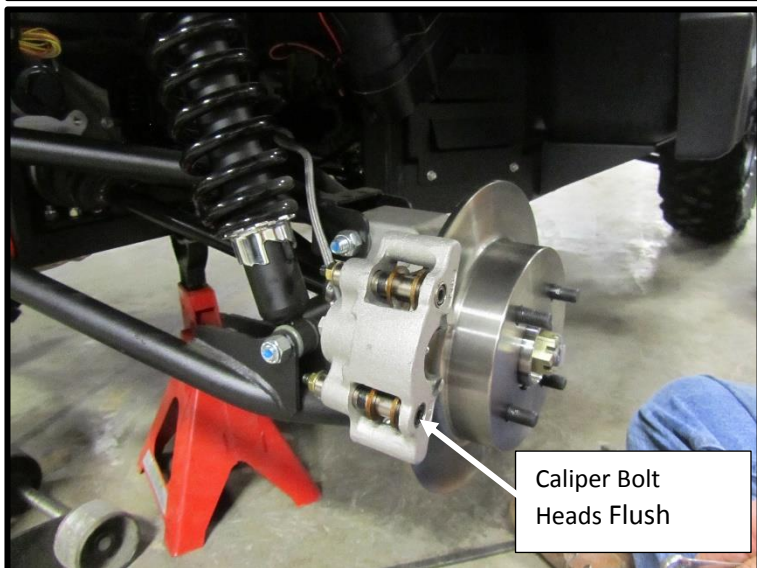
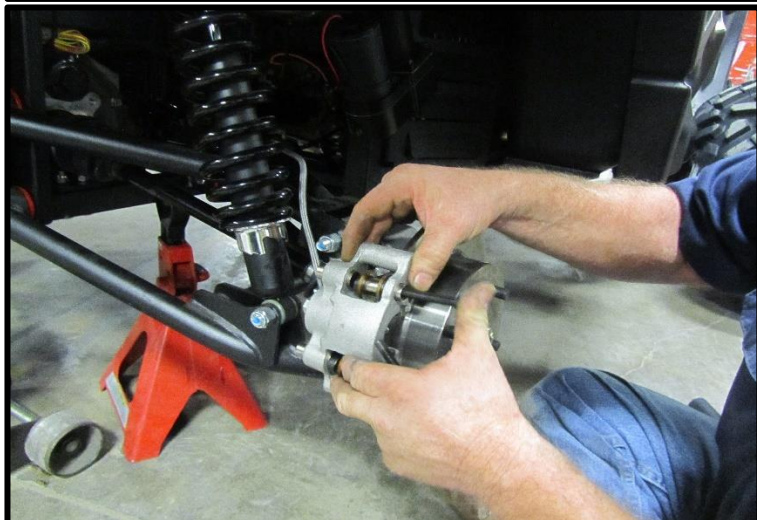
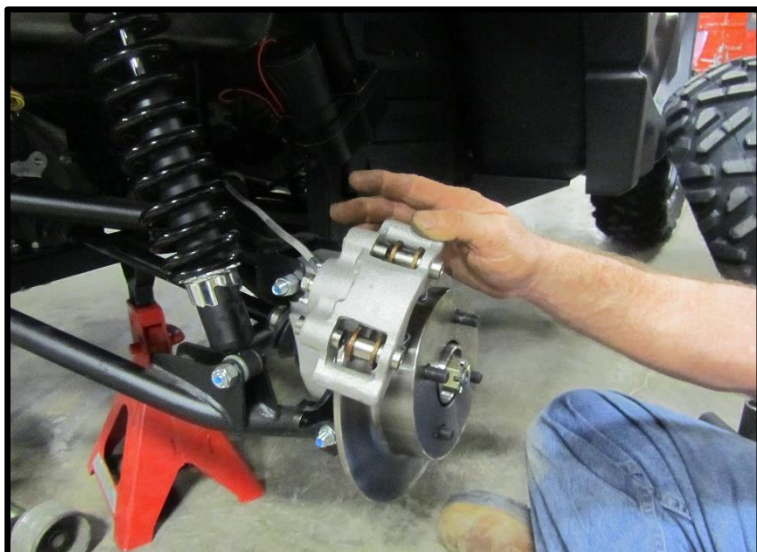
Tools: 7 mm allen wrench, 13 mm socket, 17 mm socket

1. Install the rotor.
2. If the spacers around the caliper bolts have been removed then install them. Verify that the countersunk spacers go toward the front of the caliper to allow the bolt head to mount flush with the caliper surface.



Removing Rear Half Shaft – Kohler 750, Intimidator 800, and Kohler 1000

Step 7 Cont. – Installing Rotor and Caliper Brakes



3. Install the caliper bolts through the mounting holes on the rear suspension hub and tighten using a 13 mm socket on the nuts and a 7 mm allen wrench on the bolt heads.
4. Mount the wheel. Tighten the 4 lugs nuts with a 17 mm socket to 65 foot pounds force.
5. Install hub cap and lower the UTV to ground.
6. Repeat procedure for the other rear half shaft if needed.



Removing Upper / Lower Ball Joints & Front Half Axle – Kohler 750, Intimidator 800, and Kohler 1000

Step 1 – Removing Tire



Material:

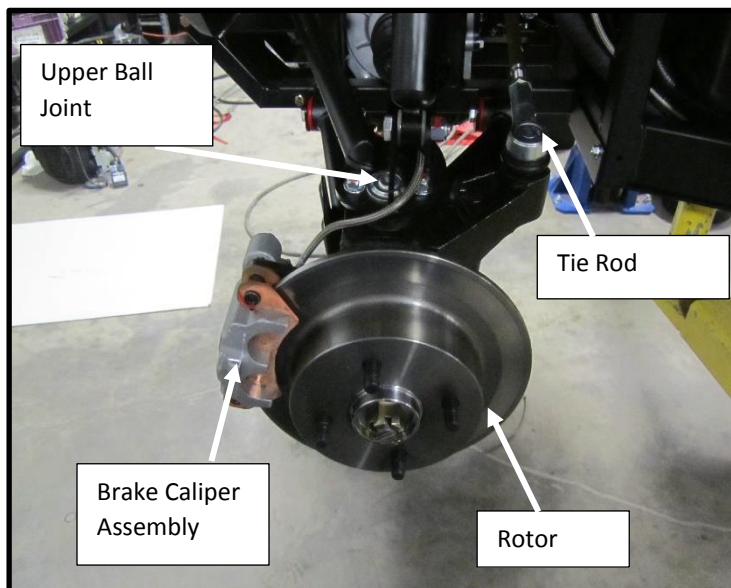
Tools: 17 mm socket

Safety:

- Place the UTV in Park on level ground and turn off the ignition.
- For easier access to the brakes use a lift or jack along with jack stands.

1. Remove the hub cover.
2. Using a 17 mm socket remove the wheel.

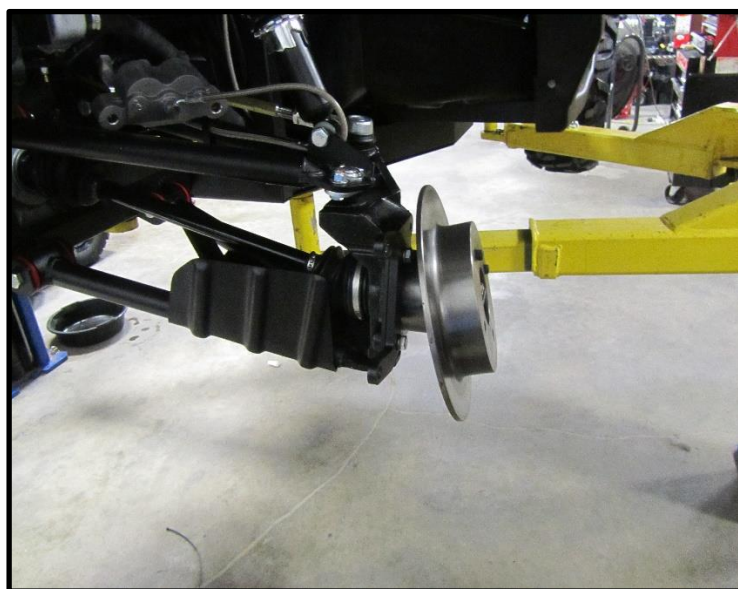
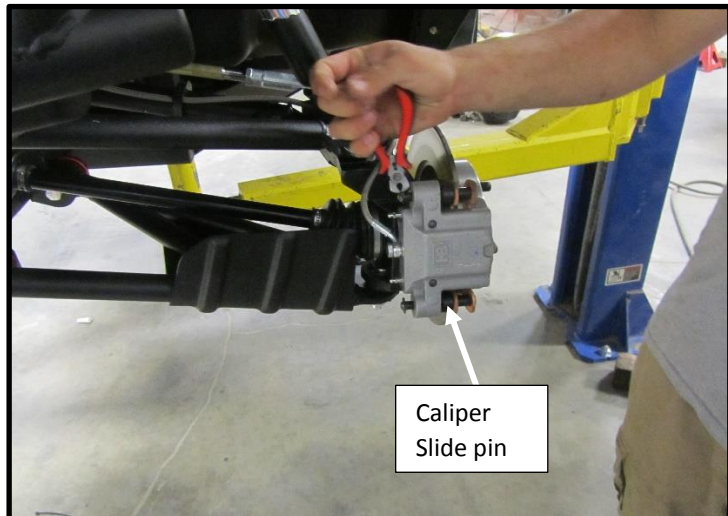
3. Locate the front suspension as shown.





Removing Upper / Lower Ball Joints & Front Half Axle – Kohler 750, Intimidator 800, and Kohler 1000

Step 2- Removing Brake Caliper Assembly



Material:

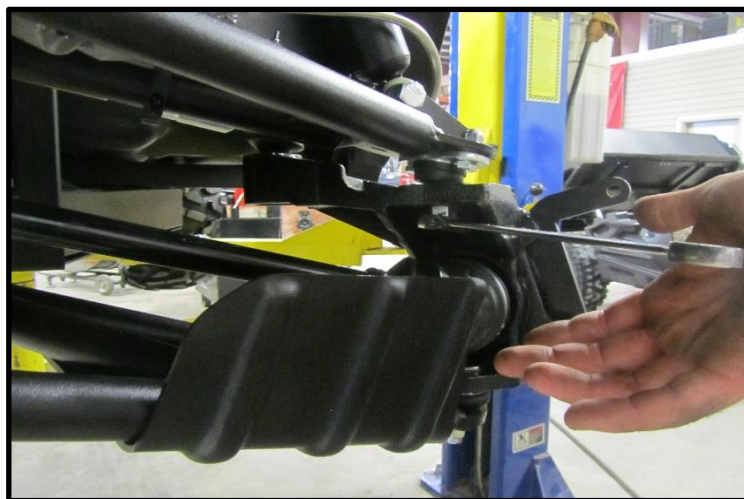
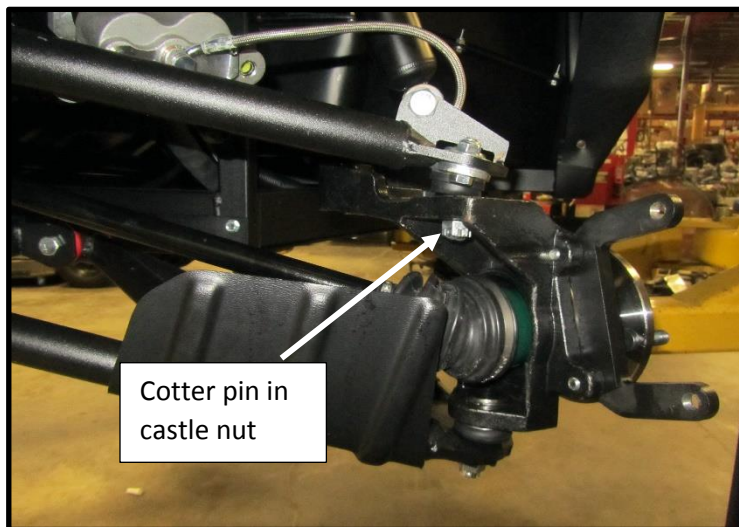
Tools: Pliers, T-45 Torx bit

1. Remove snap rings from the back of each of 2 caliper slide pins.
2. Using a T-45 Torx bit remove the 2 slide pins allowing the caliper assembly to be separated from the rotor.
3. Place the caliper assembly back out of the way and remove the rotor.



Removing Upper / Lower Ball Joints & Front Half Axle – Kohler 750, Intimidator 800, and Kohler 1000

Step 3 – Removing Upper Ball Joint



Material:

Tools: 3/4" wrench, 9/16" socket,

1. Remove the cotter pin from the upper ball joint castle nut.

2. Remove the castle nut with a 3/4" wrench.

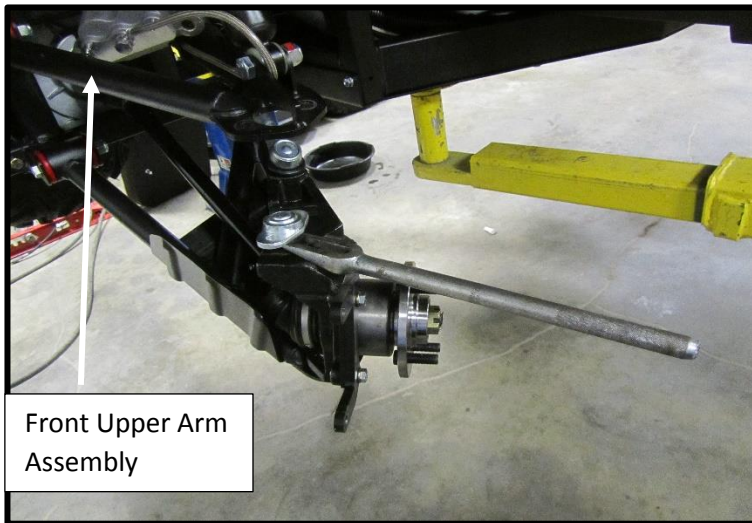
3. Remove the 2 bolts and nylock nuts on opposite sides of the upper ball joint with a 9/16" socket and wrench as shown.

Note: When reattaching the arm use new 3/8"-16 X 1-1/4" hex bolts to ensure longevity of bolts.



Removing Upper / Lower Ball Joints & Front Half Axle – Kohler 750, Intimidator 800, and Kohler 1000

Step 3 Cont. – Removing Upper Ball Joint

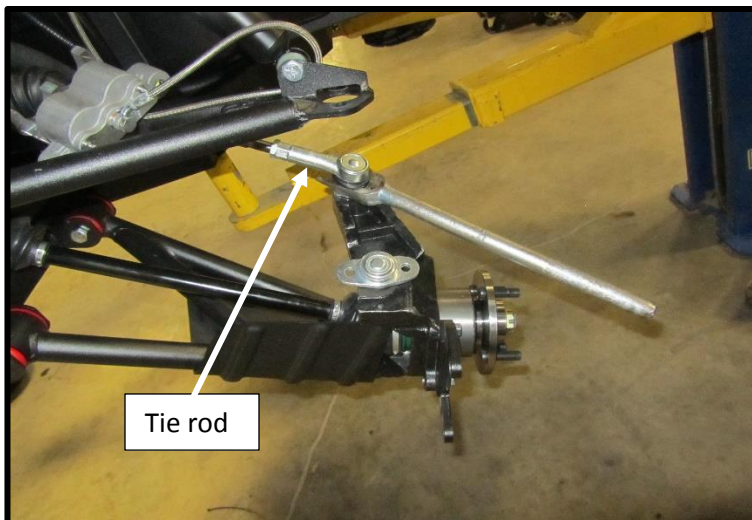


Material:

Tools: Ball joint tool

4. Lower the front suspension from the upper arm to provide access to the upper ball joint.
5. If upper ball joint is old or needs changing remove it from the spindle using a ball joint tool.
6. If the upper ball joint is OK then leave it in place and proceed to the next step to access the lower ball joint and the front half axle.

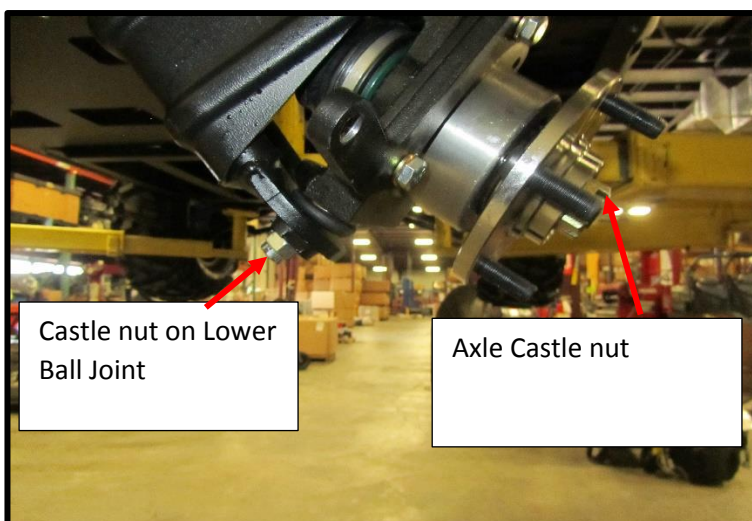
Step 4 – Removing the Lower Ball Joint & Front Half Shaft



Material:

Tools: 3/4" socket, ball joint tool, 1-1/8" or a 1-13/16" socket

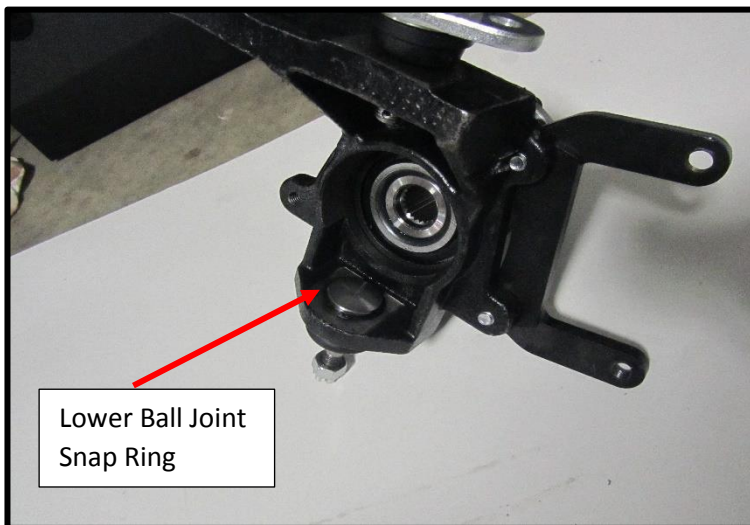
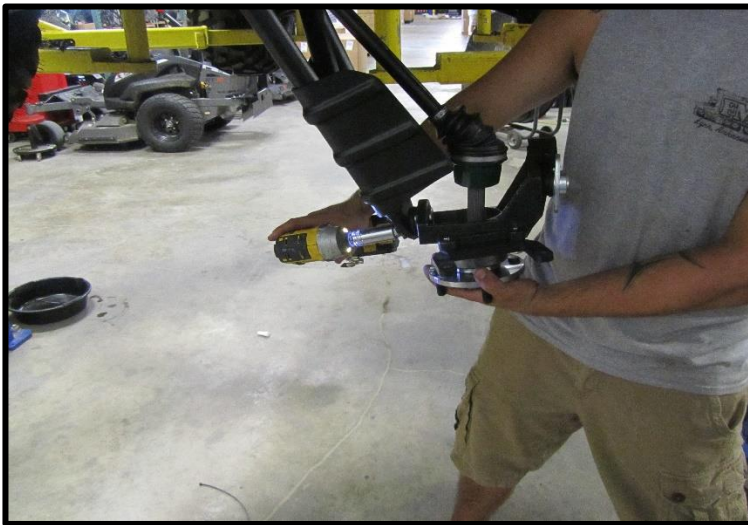
1. Remove the nylock nut from the tie rod with a 3/4" socket.
2. Using a hammer if needed and a ball joint tool to separate tie rod from spindle as shown.
3. Remove cotter pin from castle nut on lower ball joint as shown.
4. Remove cotter pin from castle nut on axle.
5. Remove axle castle nut with a 1-1/8" or 1-13/16" socket depending on the model UTV.





Removing Upper / Lower Ball Joints & Front Half Axle – Kohler 750, Intimidator 800, and Kohler 1000

Step 4 Cont. – Removing the Lower Ball Joint & Front Half Shaft



Material:

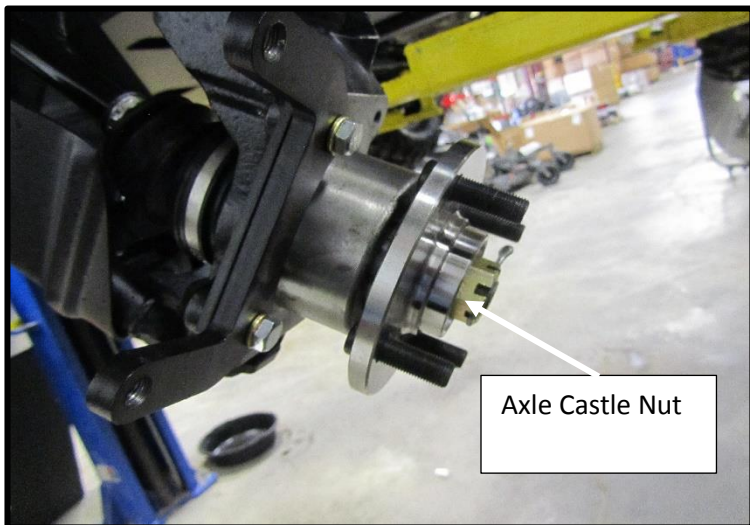
Tools: 3/4" socket, pliers

6. Holding the front hub assembly in one hand as shown remove lower ball joint castle nut with a 3/4" socket.
7. Remove the front hub assembly and set it on a bench.
8. If the lower ball joint is old or needs replacing remove the snap ring as shown and then remove the lower ball joint.
9. To remove the front half shaft grab the shaft with both hands and pull to separate it from the front differential as shown.



Removing Upper / Lower Ball Joints & Front Half Axle – Kohler 750, Intimidator 800, and Kohler 1000

Step 5 – Reinstallation of Ball Joints and Front Half Shaft



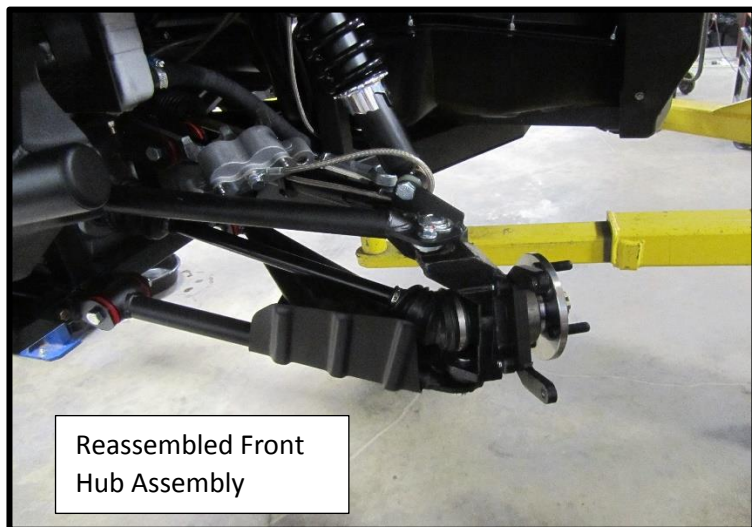
Material: 2 new 3/8"-16 X 1-1/4" hex bolts
Tools: 3/4" socket & wrench, 9/16" socket, T-45 Torx fitting, 17 mm socket

1. To reinstall the front half shaft use a rubber mallet when inserting it into the front differential.
2. Reversing the order of previous steps install a new lower ball joint (if needed) into the front hub assembly and secure with a new snap ring.
3. Install the front hub assembly back on to the shaft and tighten the castle nut on the lower ball joint with a 3/4" socket.
4. Install and tighten the castle nut on the axle. Then install new cotter pins for both castle nuts.
5. Connect the tie rod to the spindle. Use Loctite and tighten the nut with a 3/4" socket.
6. Install a new upper ball joint (if needed) to the upper arm assembly. Use Loctite on the 2 new hex bolts on either side of ball joint. Tighten the bolts and nuts with a 9/16" socket and wrench.
7. Raise the lower front suspension to the upper ball joint. Install the castle nut on the upper ball joint and tighten with a 3/4" wrench. Install a new cotter pin.



Removing Upper / Lower Ball Joints & Front Half Axle – Kohler 750, Intimidator 800, and Kohler 1000

Step 5 Cont. – Reinstallation of Ball Joints and Front Half Shaft

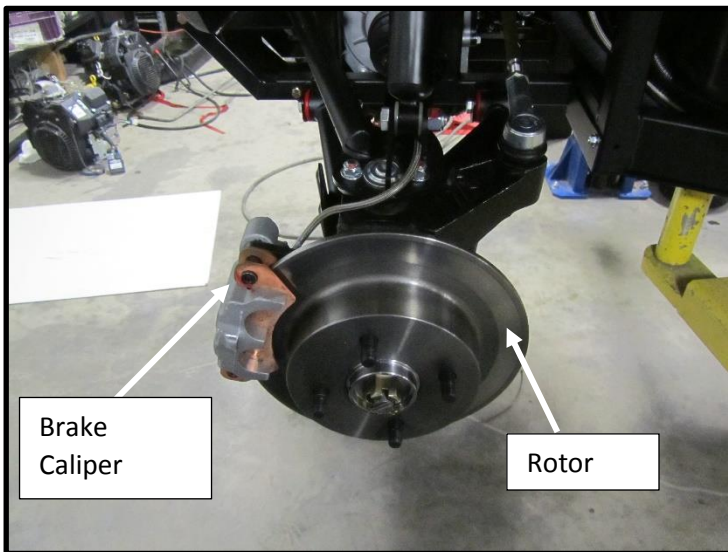


8. Reinstall the rotor onto the hub. Then install caliper onto the rotor and tighten the slide pins with a T-45 Torx fitting. Secure the slide pins with new snap rings.
9. Reinstall the wheel with a 17 mm socket and then the hub cover.
10. Repeat this procedure if needed for the other front wheel.



Replacing Brake Pads for a Dual Piston System – Kohler 750, Intimidator 800, & Kohler 1000

Step 1 – Removing Tire



Material:

Tools: 17 mm socket

Safety:

- Place the UTV in Park on level ground and turn off the ignition.
- For easier access to the brakes use a lift or jack along with jack stands.

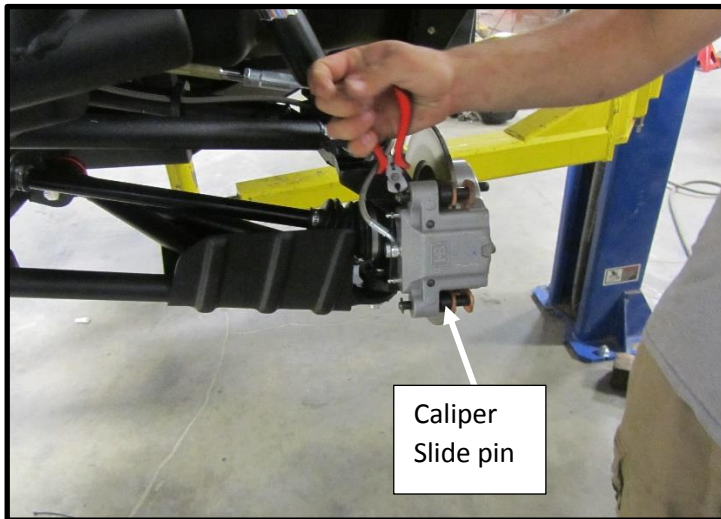
Note: This procedure describes replacing pads for a dual piston brake system.

1. Remove the hub cover.
2. Using a 17 mm socket remove the wheel.
3. Locate the brakes and rotor as shown.



Replacing Brake Pads for a Dual Piston System – Kohler 750, Intimidator 800, & Kohler 1000

Step 2- Removing Brake Caliper Assembly



Material:

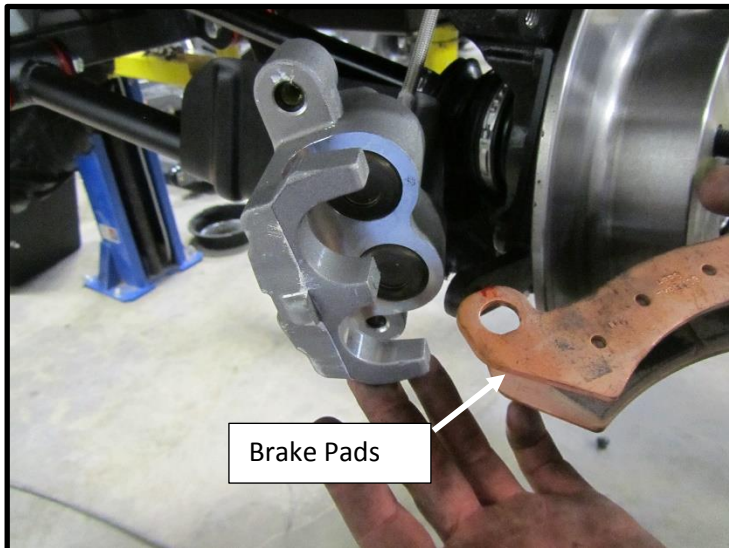
Tools: Pliers, T-45 Torx bit

1. Remove snap rings from the back of each of 2 caliper slide pins.
2. Using a T-45 Torx bit remove the 2 slide pins allowing the caliper assembly to be separated from the rotor.



Replacing Brake Pads for a Dual Piston System – Kohler 750, Intimidator 800, & Kohler 1000

Step 3 – Replacing Pads and Completing Job



Material:

Tools: Pliers, T-45 Torx bit, 17 mm socket

1. Remove the old brake pads.
2. Replace the old brake pads with a set of new pads.
3. Reinstall the caliper onto the rotor.
4. Install the slide pins and tighten.
5. Install **new** snap rings.
6. Reinstall the wheel and hub cover.
7. Repeat this procedure for the other three wheels and brakes.



Replacing Brake Pads for a Single Piston Brake System

Step 1 – Removing Rear Tire



Material:

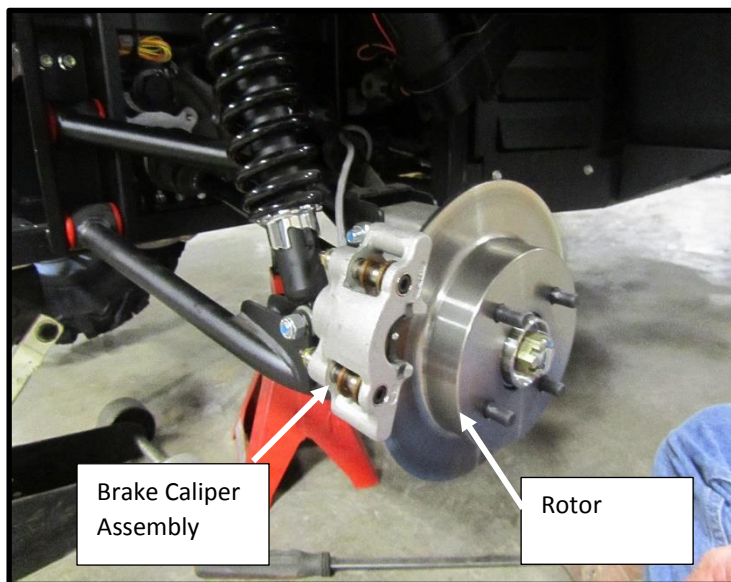
Tools: 17 mm socket

Safety:

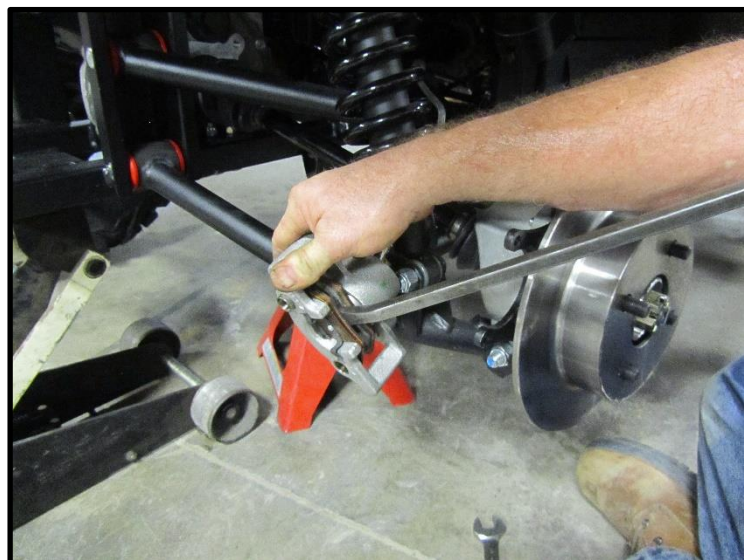
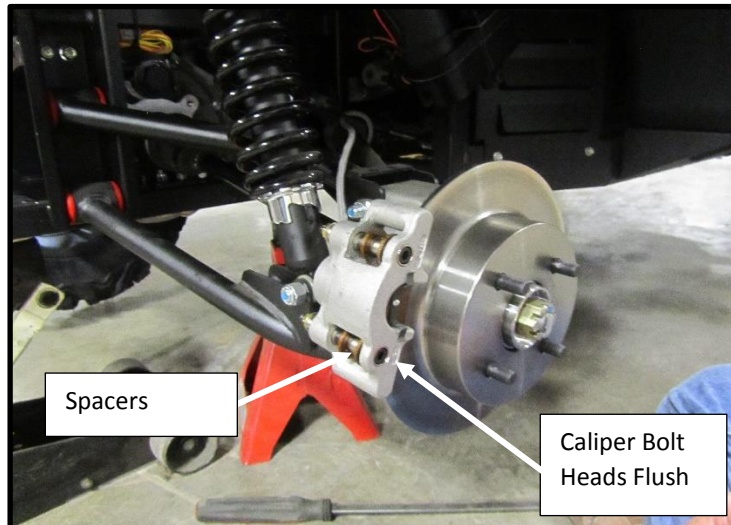
- Place the UTV in Park on level ground and turn off the ignition.
- To access the rear brakes use a lift or jack along with jack stands.

1. Remove the hub cover.
2. Using a 17 mm socket remove the 4 lug nuts and then the wheel.

3. Locate the rear suspension as shown.



Step 2- Removing Brake Caliper Assembly



Material:

Tools: 13 mm socket or wrench, 7 mm allen wrench

1. Using a 13 mm wrench or socket and a 7 mm allen wrench remove the two nuts and bolts from the caliper.

Note: The 2 spacers for each bolt are different with the front spacers being countersunk to allow the bolt heads to be flush with surface of the caliper.

2. Remove the caliper from the rear suspension hub. Place a pry bar in between the brake pads and back the piston out.

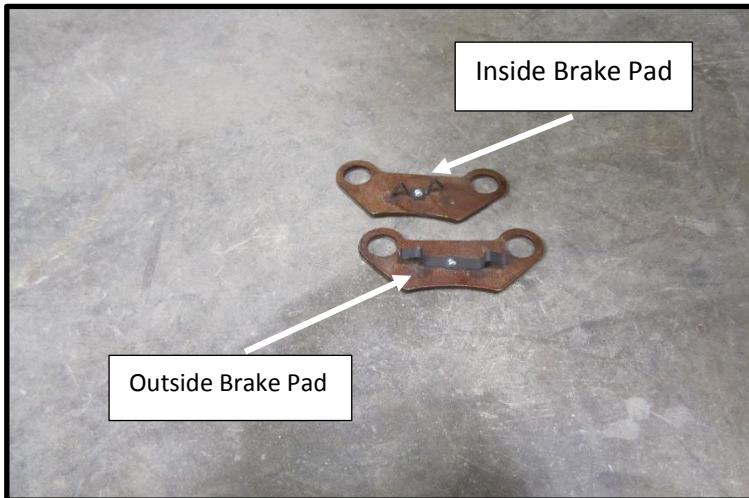
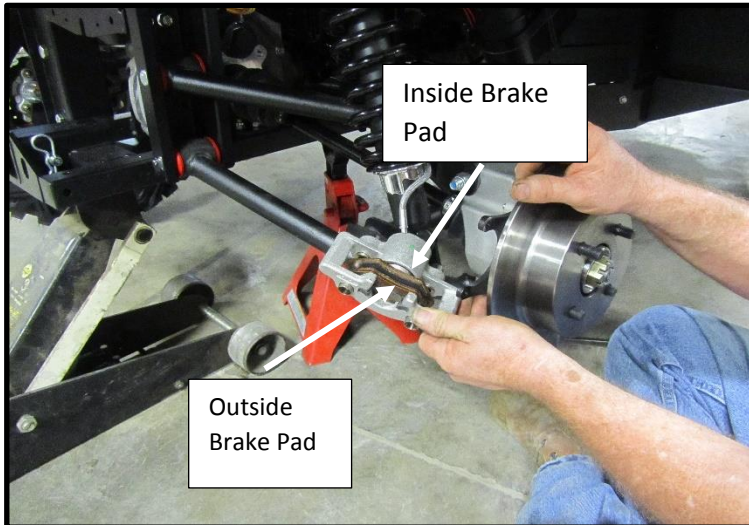
Note: This additional space is needed to allow new (thicker) brake pads to be installed.

3. Remove the spacers for the caliper bolts.
4. Remove the rotor.



Replacing Brake Pads for a Single Piston Brake System

Step 3 – Replacing the Brake Pads



Material: New Brake Pads
(Intimidator Part # 616-1056-00)

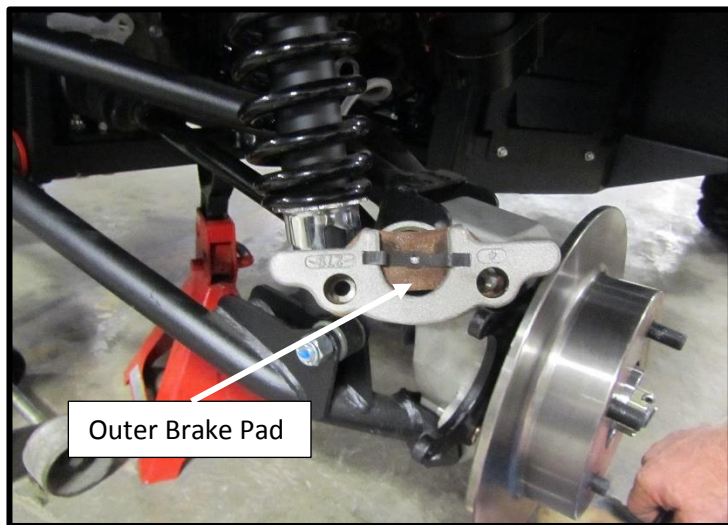
Tools:

1. Remove the outside brake pad then the inside brake pad as shown.
2. Obtain new brake pads and take note of the different attachment clips on the back of each pad.
3. Insert the inside brake pad first as shown.



Replacing Brake Pads for a Single Piston Brake System

Step 3 Cont.— Replacing the Brake Pads

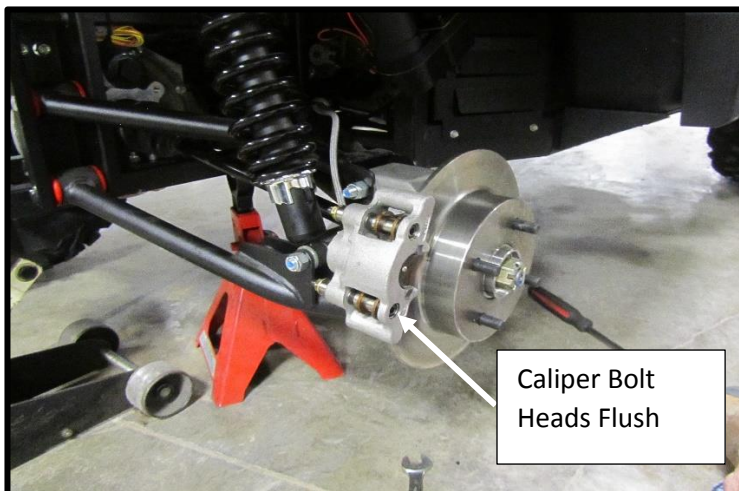


4. Insert the outer brake pad next as shown.



Replacing Brake Pads for a Single Piston Brake System

Step 4 – Installing the Caliper and Completing the Job



Material:

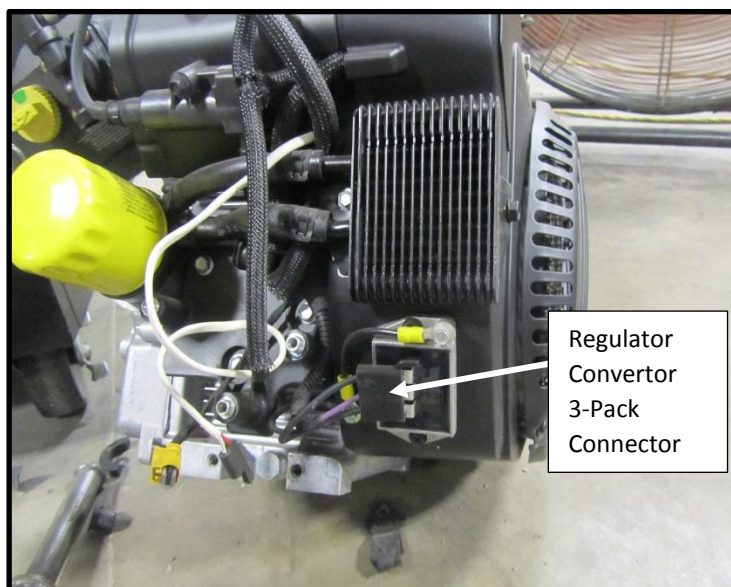
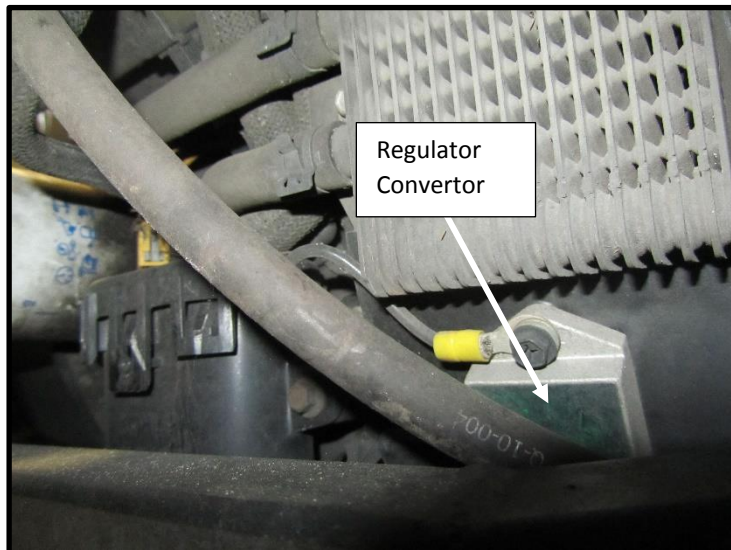
Tools: 13 mm socket or wrench, 7 mm allen wrench, 17 mm socket

1. Insert the 2 spacers and the caliper mounting bolts through the mounting holes on the rear suspension hub and onto the rotor. Verify that the countersunk spacers go toward the front of the caliper to allow the bolt head to mount flush with the caliper surface.
2. Tighten the caliper using a 13 mm socket on the nuts and a 7 mm allen wrench on the bolt heads.
3. Mount the wheel. Tighten the 4 lugs nuts with a 17 mm socket to 65 foot-pounds force.
4. Install hub cap and lower the UTV to ground.
5. Repeat this procedure to replace the brake pads on the other rear wheel.



Checking the Charging System – Kohler 750

Step 1 – Preparation for Kohler 750



Material:

Tools:

Safety:

- Place the UTV in Park on level ground and turn off the ignition.

Note 1: This procedure describes how to determine condition of wiring, fuses, and stator when having problems with the gasoline charging systems.

Note 2: This procedure assumes the current battery has been checked out and determined to be in good working condition. See Owner's Manual for checking the battery if needed.

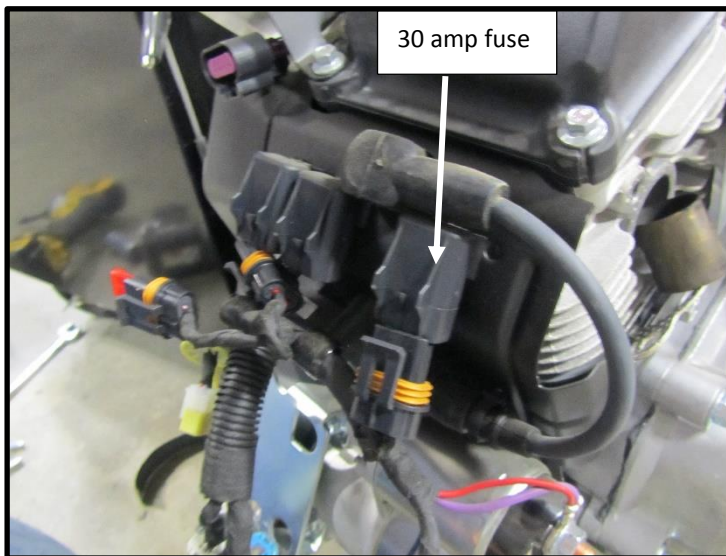
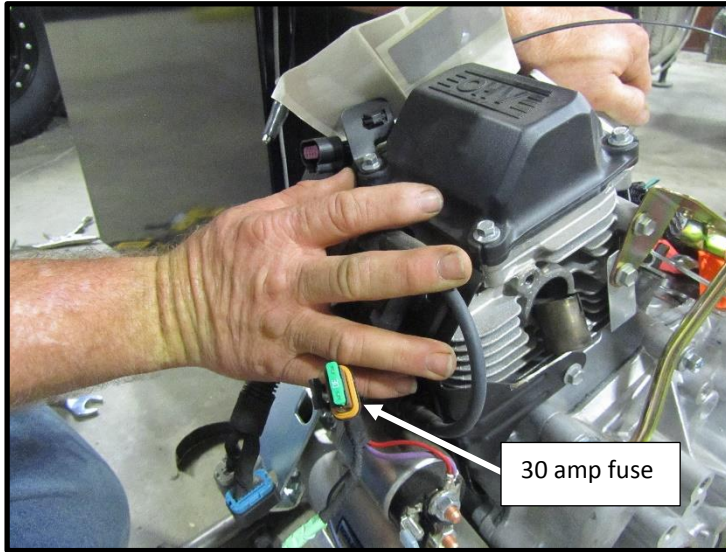
1. Remove the back seat and raise the bed.
2. Locate the regulator convertor on the engine under the cooler behind the driver's seat facing the outside as shown.
3. Note the 3 pack connector on the regulator converter has 2 black wires on the outside and a purple wire on the inside. The black wires go to the stator and are AC voltage. The purple wire goes to the top post on the starter and is 12 volt DC voltage.

Note: For clarification this picture and following pictures are of an uninstalled engine.



Checking the Charging System – Kohler 750

Step 2 – Checking the Fuse for Kohler 750



Material: 30 amp fuse

Tools:

1. Unplug the 3 pack connector and check the purple wire with a volt meter. This should be the voltage capable of your current battery voltage.
2. If the voltage is not the current battery voltage then check the 30 amp fuse on the purple wire coming off of starter on opposite side of engine as shown. Replace fuse if needed.

Note: This is only 30 amp fuse in the bank of 3 fuses.

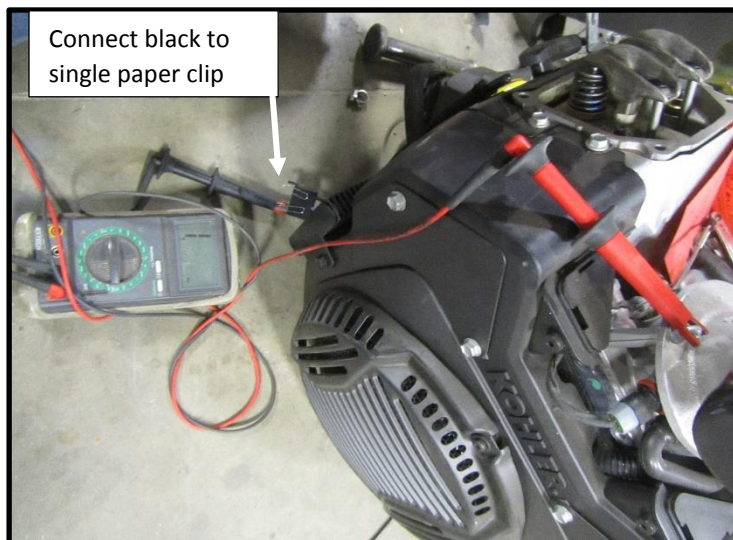
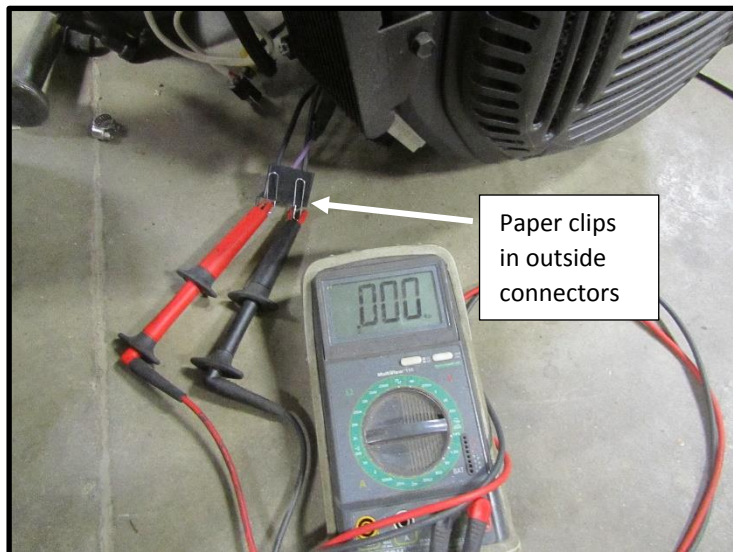


Checking the Charging System – Kohler 750

Step 3 – Checking the Stator and Regulator Converter for Kohler 750

Material: Paper clips

Tools: OHM / Volt Meter

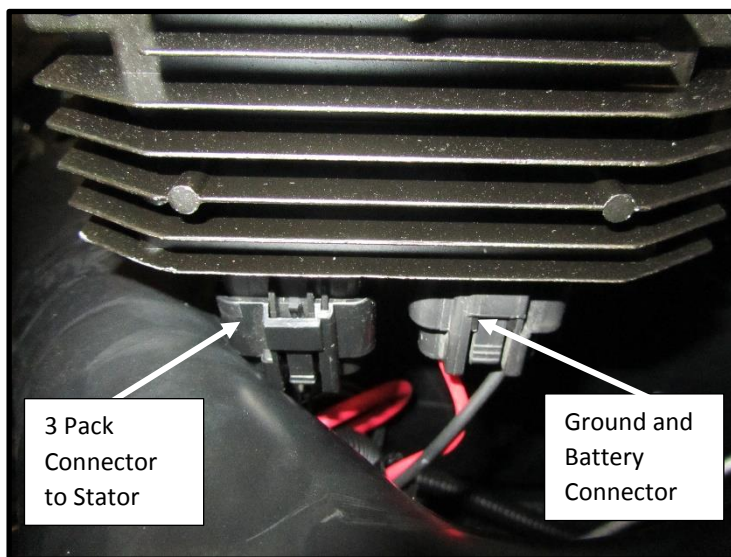
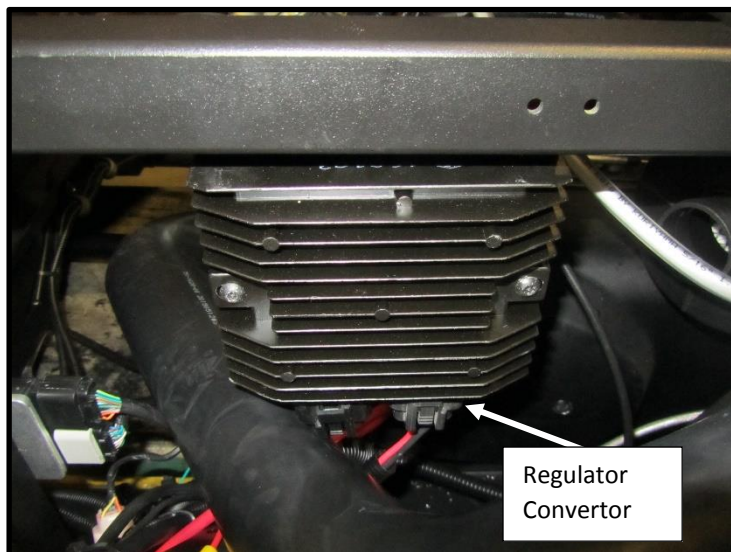


1. Install 2 paper clips into the 3 pack connector for each of the 2 black wires. Connect to an OHM / Volt meter as shown. With a setting of 2 K ohms verify there is no resistance or that it ohms straight through. If it goes OL (out of limits) then there is likely a stator issue.
2. Connect each leg separately to one of the black wires and ground to engine block as shown with a 2 K ohms setting. Then connect to the other black wire. If either black wire ohms to engine block then there is a stator problem. Both legs should OHM OL for a good stator.
3. Connect both leads on the OHM / Volt meter to paper clips to the black wires on 3 pack connector at same time with a setting of 200 volts on the meter.
4. Switch volt meter to AC.
5. Start engine and allow to idle. A good stator will show Toggling AC voltage on the meter. If not then stator is bad and needs replacing.
6. Reattach the three wire connector pack to the regulator converter.
7. Attach OHM / Volt meter to the battery. Attach positive connector to positive post and negative connector to negative post on the battery and start engine. Rev engine up to 1500 RPM. If meter does not indicate charging above 12.5 up to 14 volts then the regulator converter is bad and needs replacing.



Checking the Charging System – Intimidator 800

Step 1 – Preparation for Intimidator 800



Material:

Tools:

Safety:

- Place the UTV in Park on level ground and turn off the ignition.

Note 1: This procedure describes three tests to determine condition of stator when having problems with the gasoline charging system.

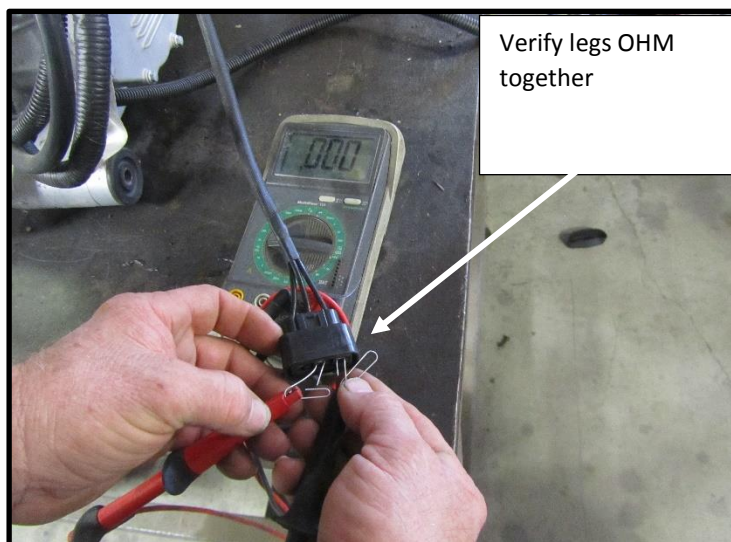
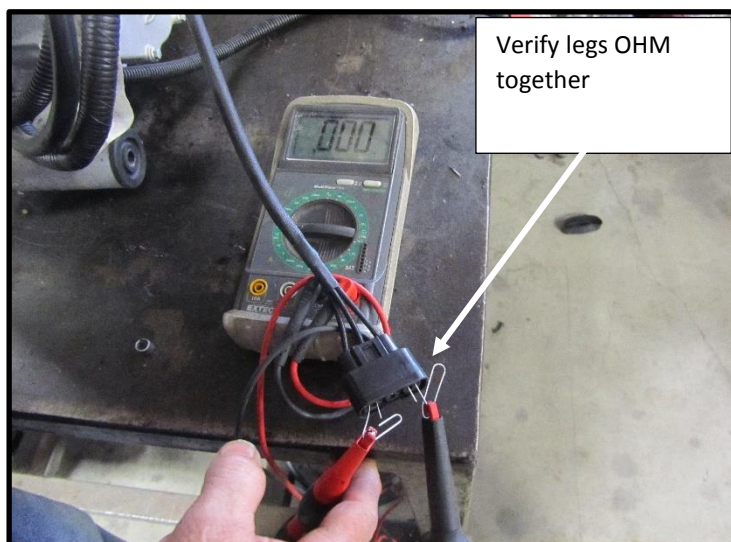
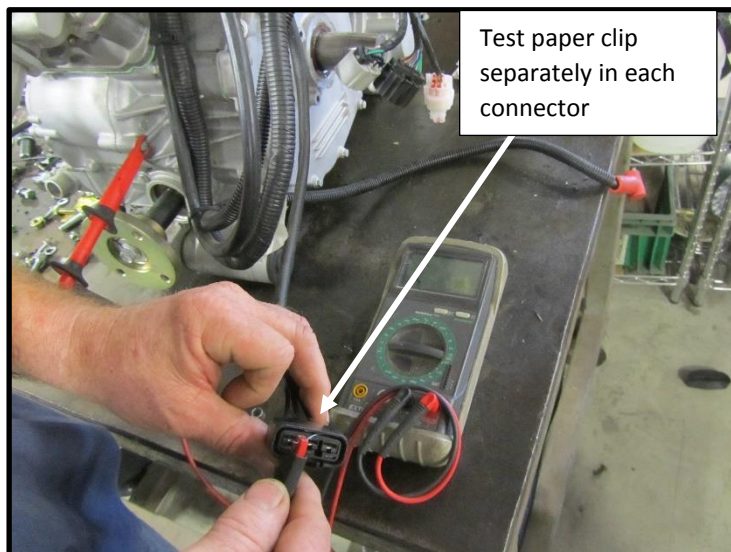
Note 2: This procedure assumes the current battery has been checked out and determined to be in good working condition. See Owner's Manual for checking the battery if needed.

1. Remove the back seat and raise the bed.
2. Locate the regulator convertor on the engine under the cooler behind the driver's seat facing the outside as shown.
3. Note the 3 pack connector on the regulator converter has 3 black wires to the stator all with AC voltage. It does not have a DC wire with fuse as the Kohler 750 does.



Checking the Charging System – Intimidator 800

Step 2 – Checking the Stator for the Intimidator 800



Material:

Tools: OHM / Volt Meter

1. Remove the 3 pack connector with 3 black wires from the regulator convertor.

Note: For clarification this picture and following pictures are of an uninstalled engine.

2. Install single paper clip into the 3 pack connector for one of the 3 black wires. Connect to an OHM / Volt meter as shown with black to 3 pack and red to engine block. With a setting of 2 K ohms verify there is no resistance or that it ohms straight through. Repeat this test twice for each of the other 2 black wires. If any of the three black wires go OL (out of limits) then there is likely a stator issue.
3. Verify that all three legs ohm together by connecting 2 paper clips and attaching to OHM / Volt meter with a 2 K ohms setting as shown. Three separate tests are required to check all combinations of the three black wires. The testing of the left and center connectors is not shown in the photos. All three test should show the legs ohm together for the stator to be good.
4. One last test to determine if stator is good is to check the Toggling AC voltage on the 3 black wires to the stator.

Note: No pictures are shown for this last test. The connections of the leads to the three pack for this step are the same as the last two pictures. The OHM / Volt meter settings are different than the pictures.

5. Connect both leads on the OHM / Volt meter to paper clips to the two outside black wires on 3 pack connector at same



Checking the Charging System – Intimidator 800

	<p>time with a setting of 200 volts on the meter.</p> <ol style="list-style-type: none">6. Switch volt meter to AC.7. Start engine and allow to idle. A good stator will show Toggling AC voltage on the meter.8. Turn off engine.9. Connect both leads to paper clips in one of the outside connectors and one in the middle connector.10. With a setting of 200 volts and with the meter in AC position turn engine on and allow to idle. A good stator will show Toggling AC voltage on the meter.11. Good results for all three of these tests described in the steps above indicate a good stator and magnets on the flywheel.12. Any bad results as described in each of the test indicate stator needs replacing.13. After addressing stator condition reattach the three wire connector pack to the regulator converter.
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Check Engine Light – Kohler 750

Material:

Tools:

Safety:

- Place the UTV in Park on level ground and turn off the ignition.

Note:

When the Check Engine Light comes on it is important to determine the Fault Code and contact Intimidator with this information. The engine is continuously monitored against preset performance limits. If any parameter operates outside these preset limits then the Check Engine Light will come on and stores a diagnostic code in its fault memory. This procedure describes how to read the Fault Codes for the Kohler 750 model.

1. When the Check Engine Light comes on in the dash do the following.
 - a) Check that battery voltage is above 11 volts. If not charge the battery or replace it with a new battery.
 - b) Key Off – Key On
 - c) Key Off – Key On
 - d) Key Off – Key On (Leaving it on after 3rd sequence)
2. Check Engine Light starts blinking after the 3rd time when turning the Key Off then Key On. Have pencil and paper ready to write down the number of blinks.
3. Contact Intimidator with the fault code information.
4. Each fault code will have a series of 4 blinks separated by a 1 second pause. Then a 3 second pause followed by an End Code of 61. Each fault code is a 4 digit number beginning with a “0”.
5. The number of blinks corresponds to numbers 0 – 9 as follows.
 - 0 – 10 blinks
 - 1 – 1 blink
 - 2 – 2 blinks
 - 3 – 3 blinks
 - Etc., continuing to 9 – for 9 blinks




Check Engine Light – Kohler 750

6. Example of Diagnostic Display Code for 0131 followed by End code 61 is


(0) -          
One second pause

(1) - 
One second pause

(3) –   
One second pause

(1) – 
Three second pause for End Code

(6) –      
One second pause

(1)- 

Note: Final light comes back on but is not counted. There is no 62 code.



Check Engine Light – Kohler 750

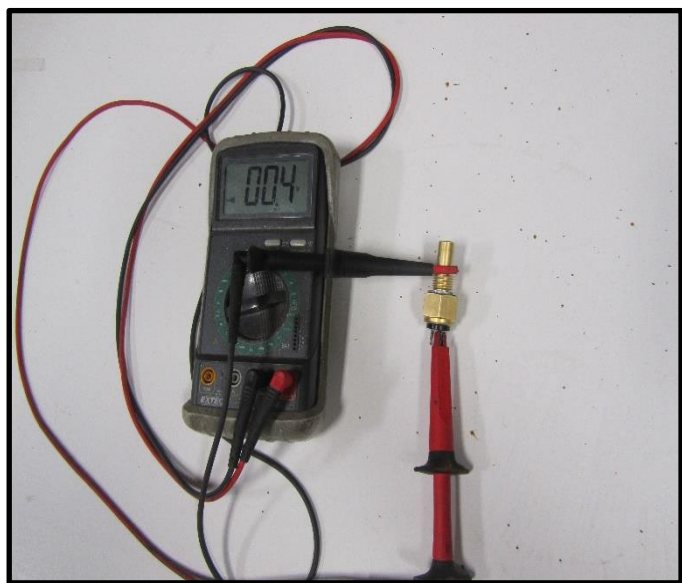
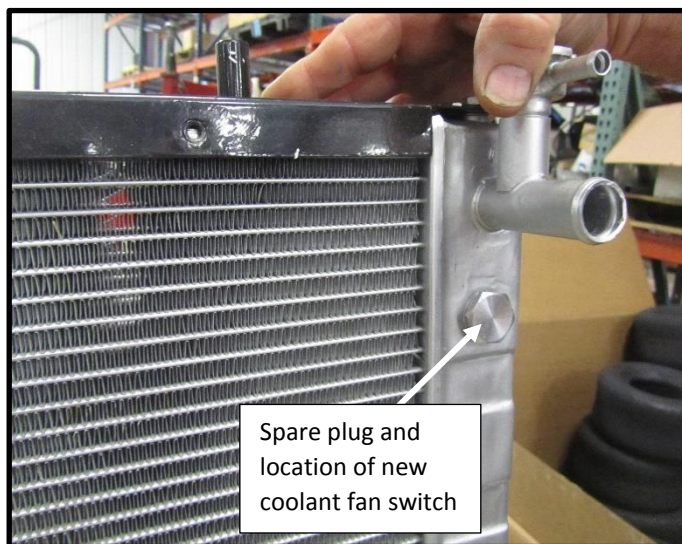
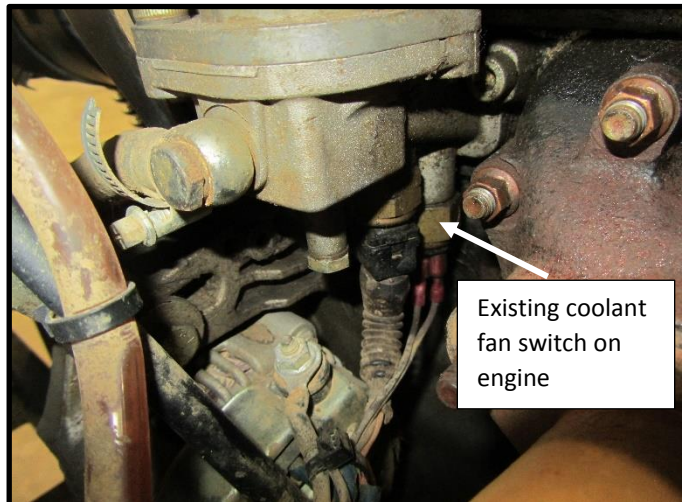
Diagnostic Fault Code Summary

Fault Code	Connection or Failure Description
0031	Oxygen Sensor Heater Circuit High Voltage
0032	Oxygen Sensor Heater Circuit Low Voltage
0107	Manifold Absolute Pressure Sensor Circuit Low Voltage or Open
0108	Manifold Absolute Pressure Sensor Circuit High Voltage
0112	Intake Air Temperature Sensor Circuit Low Voltage
0113	Intake Air Temperature Sensor Circuit High Voltage or Open
0117	Coolant/ Oil Temperature Sensor Circuit Low Voltage
0118	Coolant/ Oil Temperature Sensor Circuit High Voltage or Open
0122	Throttle Position Sensor Circuit Low Voltage or Open
0123	Throttle Position Sensor Circuit High Voltage
0131	Oxygen Sensor 1 Circuit Low Voltage or Open
0132	Oxygen Sensor 1 Circuit High Voltage
0171	Maximum Adaptation Limit Exceeded
0172	Minimum Adaptation Limit Exceeded
0174	Lean Fuel Condition at High Load (Open Loop)
0201	Injector 1 Circuit Malfunction
0202	Injector 2 Circuit Malfunction
0230	Fuel Pump Module Circuit Low Voltage or Open
0232	Fuel Pump Module Circuit High Voltage
0336	Crankshaft Position Sensor Noisy Signal
0337	Crankshaft Position Sensor No Signal
0351	Cylinder 1 Ignition Coil Malfunction
0352	Cylinder 2 Ignition Coil Malfunction
0562	System Voltage Low
0563	System Voltage High
61	End of Code Transmission



Installing a Coolant Fan Switch – Kohler 1000

Step 1 – Preparation



Material: Coolant Fan Switches – Intimidator

Part # - 786-2073-00 **or** 786-2072-00

Tools: OHM meter, 19 or 21 mm wrench

Safety:

- Place the UTV in Park on level ground and turn off the ignition.
- Radiator coolant is under pressure when UTV is hot. Escaping steam can cause severe burns when removing the cap.
- Allow engine to cool before removing radiator cap or bleeding the coolant system.

Note: This procedure describes installation of a new coolant fan switch in the radiator. The existing coolant fan switch on the engine (shown in photo) needs to stay in place since it provides the heat gauge for the speedometer.

1. Once the radiator system has cooled and is no longer under pressure open the hood and remove the radiator cap. Locate the spare plug under the fill cap as shown.
2. Remove the plug with a 19 or 21 mm socket depending upon radiator using a pan to catch any antifreeze.

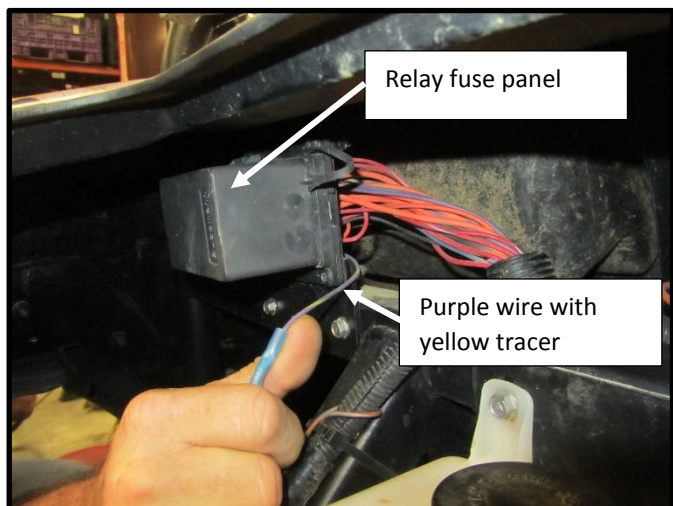
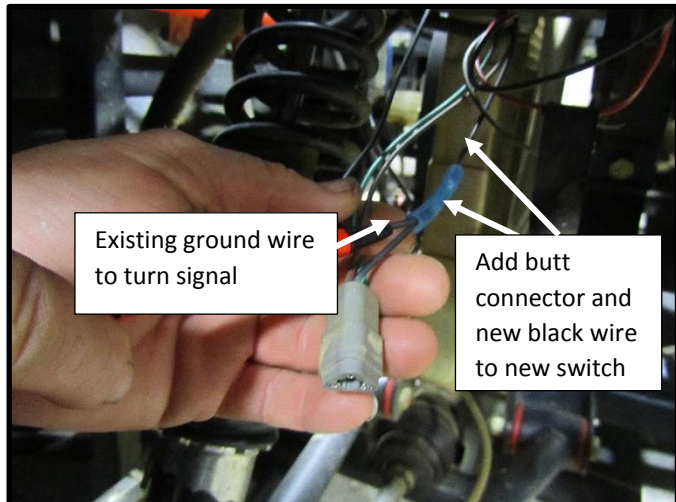
Note: There will be two sizes plugs depending upon type of radiator. This results in having 2 different size coolant fan switches which are:

- Part # 786-2073-00 for 21 mm plug
 - Part # 786-2072-00 for 19 mm plug
3. Obtain the correct coolant fan switch per note above. Connect an OHM meter to the new switch as shown and determine which of the 2 terminals is the ground.
 4. Mark the ground terminal with a permanent marker for later use.
 5. Install the new coolant fan switch into the open fitting on the radiator and tighten.



Installing a Coolant Fan Switch – Kohler 1000

Step 2 – Wiring New Switch



Material:

Tools:

1. To properly ground the new switch – install a butt connector into the existing ground (black) wire to the turn signal close to the front tire on passenger side as shown. Add a new black wire to the new switch and attach a female connector.

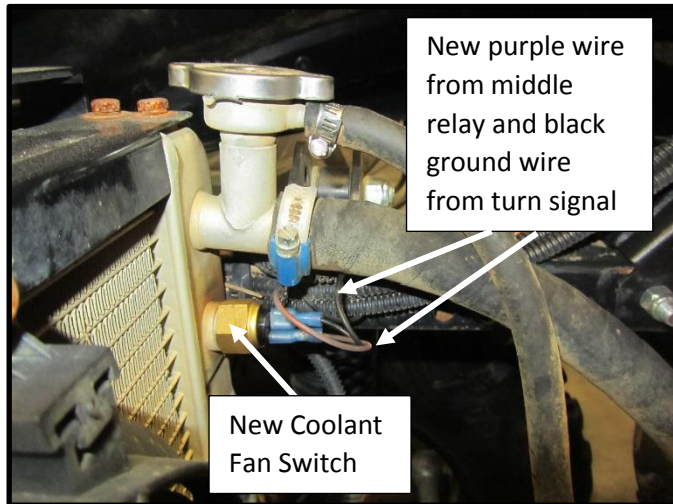
Note: Grounding to the frame is not recommended since the powder coating does not ground well and removing this coating will allow rust formation to begin.

2. Connect the new black wire to the previously marked ground terminal on the new switch.
3. Under the hood on the passenger side locate the relay fuse panel.
4. Locate the purple wire with a yellow tracer coming from the back of the middle relay. This wire is connected to the coolant fan switch at the engine.
5. Cut this purple wire and fold up the section going to existing switch and place out of the way.



Installing a Coolant Fan Switch – Kohler 1000

Step 2 Cont – Wiring New Switch



Material:

Tools:

6. Install new wire to the purple wire from the middle relay along with a female connector. Connect it to the other terminal on the new switch as shown.

Step 4 – Completing the Job



Material:

Tools:

1. Refill radiator to bottom of fill neck with a 50/50 premix antifreeze mixture. Install radiator cap.
2. Properly dispose of any collected used antifreeze.



Installing a Warning Lamp Indicator Assembly in the Dash – Kohler 750 / Intimidator 800 / Kohler 1000

Step 1 – Preparation



Material: Warning Lamp Indicator Assembly
Intimidator Part # 786-2024-00

Tools:

Safety:

- Place the UTV in Park on level ground, turn off the ignition.

Note:

This procedure can be used for replacement or a new installation of the Warning Lamp Indicator Assembly (**WLIA**).

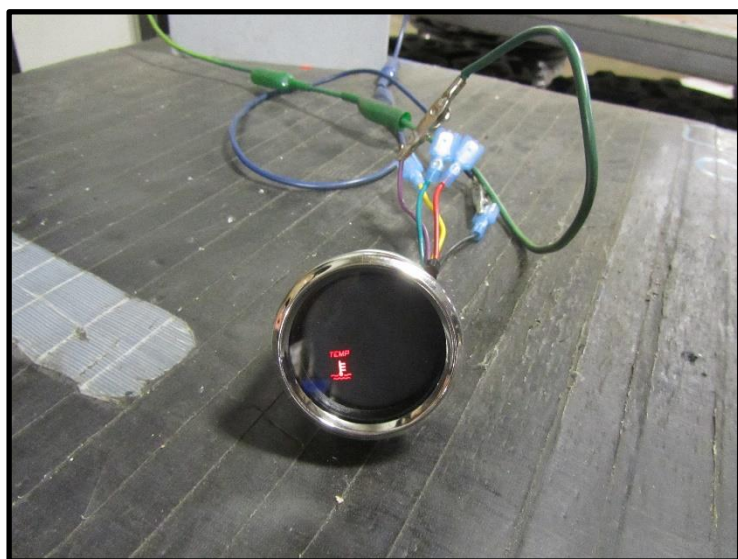
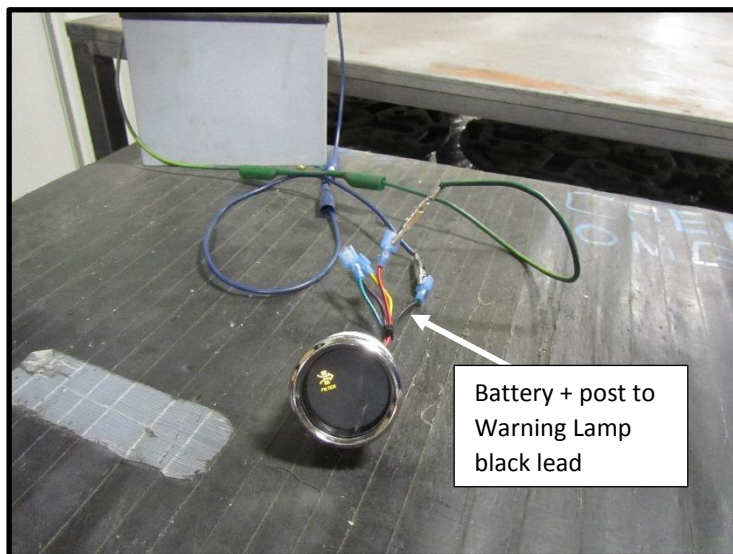
1. Note the wiring label on the side of the WLIA. Its wiring descriptions are

- Black – **Key On Hot** (Some labels may *incorrectly* state that this is ground.)
- Red – Check Air Filter
- Green - Check Engine
- Yellow – Oil
- Purple – Temperature



Installing a Warning Lamp Indicator Assembly in the Dash – Kohler 750 / Intimidator 800 / Kohler 1000

Step 2 – Check Warning Lamp



Material:

Tools: Charged 12 volt battery

1. Before installing the Warning Lamp Indicator Assembly hook it up to a 12 volt battery source as shown.
2. Connect the + post to the black wire and test individually each of the remaining 4 wires by connecting to the – post. Each should show the proper symbol on the WLIA as described above.
3. If testing each lead from the Warning Lamp Indicator Assembly does not produce the proper symbol then replace the WLIA.



Installing a Warning Lamp Indicator Assembly in the Dash – Kohler 750 / Intimidator 800 / Kohler 1000

Step 3 – Installing the Warning Lamp Indicator



Material:

Tools: 2-1/4" Drill bit, 5/16" socket

1. If new installation drill a 2-1/4" hole in dash in location as shown.
2. If replacing a Warning Lamp Indicator Assembly open hood and using a 5/16" socket remove the two nuts from the Assembly bolts. Remove the WLIA from the dash.

Material:

Tools:

Step 3 Cont. - Installing the Warning Lamp Indicator

3. If replacing the WLIA use the table below for reference if needed to wire up new WILA.
4. If a new installation - Under the hood locate the following existing wiring to their respective indicator lights in the dash. Disconnect the wires from their lights and connect to the new WLIA as shown below.

<u>Existing Wiring</u>	<u>New Warning Lamp Wiring</u>	<u>Warning Lamp Function</u>
Orange	Black	Key On Hot
Grey w/ black stripe	Red	Check Air Filter
Blue	Green	Check Engine
Green	Yellow	Oil
Purple*	Purple	Temperature

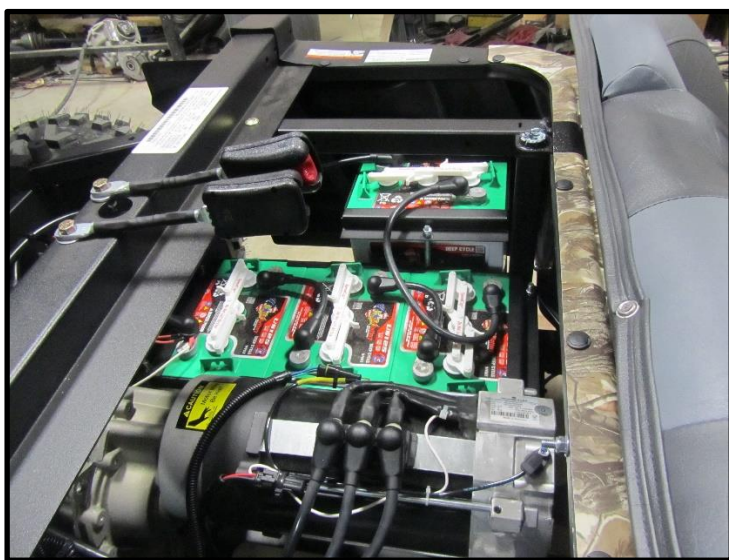
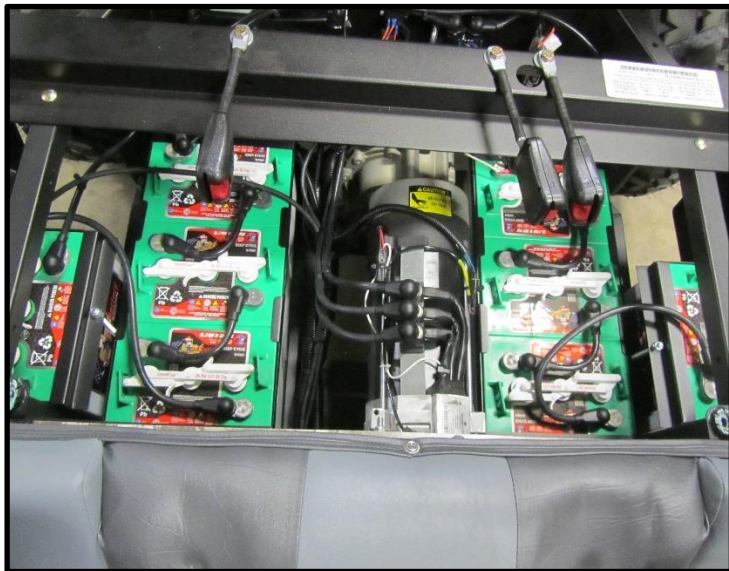
Note: *The Intimidator 800 temperature light is in the speedometer dial and will not be able to be connected to the WLIA.

5. Using a 5/16" socket install and tighten the nuts on the WLIA bolts to attach to dash.



Proper Battery Maintenance for EV (Electric) Model

Step 1 – Preparation



Material:

Tools:

Safety:

- Place the UTV in Park on level ground, turn off the ignition, and remove the key.
- During normal operation batteries generate explosive gases. Keep work area well ventilated. All open flames and sparks (including **smoking**) should be eliminated in the vicinity of the batteries.
- Batteries contain sulfuric acid which will burn the skin and eyes. Immediately flush any exposed area with water and seek medical attention.

Note: This procedure is for the **EV model** only. The Kohler 750, Kohler 1000, and Intimidator 800 all have similar 12 volt batteries and maintenance instructions are provided in the Owner's Manual.

1. Remove the rear seat.

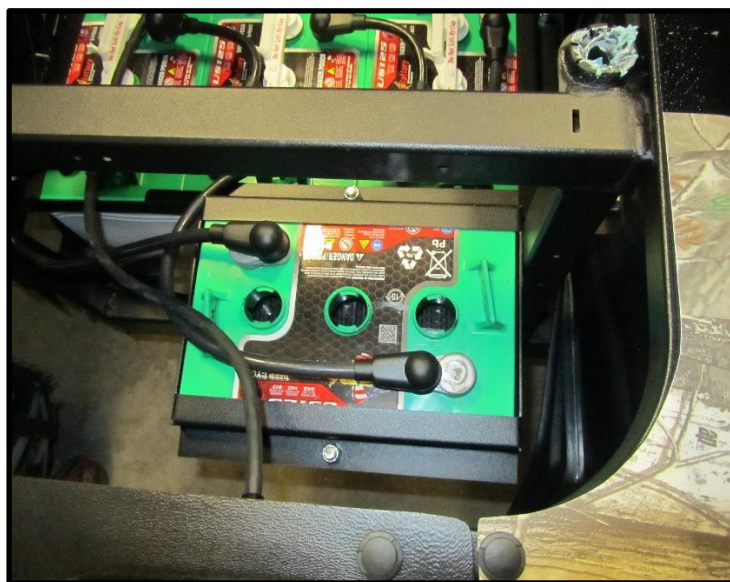
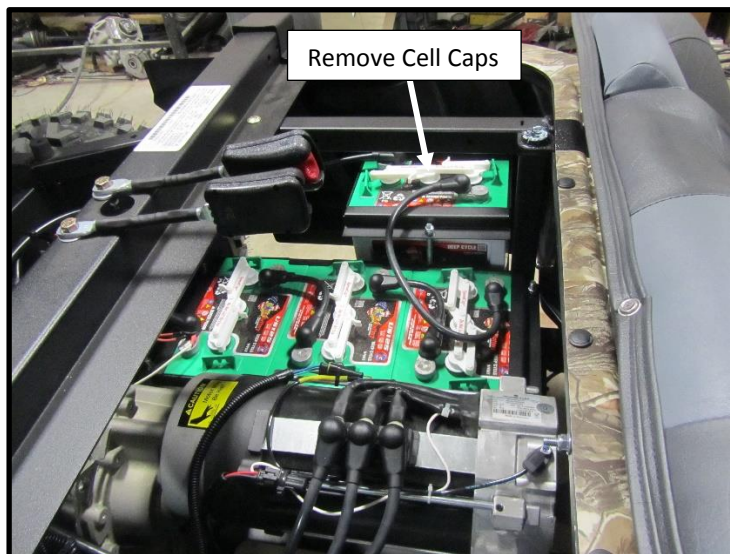
2. Locate the batteries.

Note: The EV model has 8 identical 6 volt batteries under the rear seat, four on each side.



Proper Battery Maintenance for EV (Electric) Model

Step 2 – Battery Maintenance



Material:

Tools: 1/2" socket, wire brush, torque wrench

1. Remove the caps from a battery (one battery at a time) and check the liquid level in each cell. Normal level should be right above the cell plate. Add distilled water to each cell as needed. Install caps.
2. If the terminals are fouled remove the connectors (negative terminal **first** then positive terminal) using a 1/2" socket and clean with a wire terminal brush.

Note: Keeping terminals coated with dielectric grease or petroleum jelly will increase the battery life.

3. Reinstall the vehicle connectors onto the terminals (positive terminal **first** then negative terminal) and torque the terminal nuts with 150 inch-pound force.

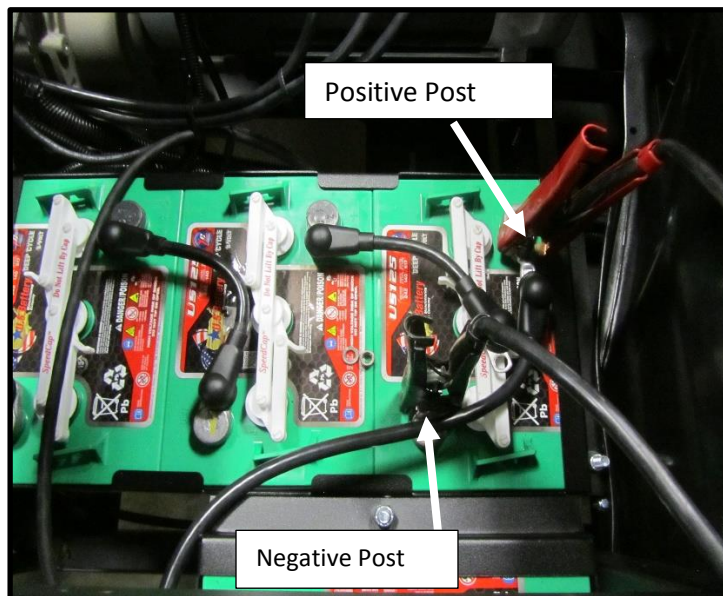
Safety: Never use an impact driver to tighten the terminal nut or overtighten with any wrench. Damage to the battery post, even causing it to arc and melt, can occur when overtightening.

4. Repeat the following steps above for the remaining 7 batteries.



Proper Battery Maintenance for EV (Electric) Model

Step 3 – Checking the Battery Charge



Material:

Tools: 1/2" socket, torque wrench

1. Check state of each battery.
2. Remove the battery cable connector from the negative post **first**.
3. Remove the cable connector from the positive post next.
4. Using an appropriate load tester connect the black connector on the tester to the negative post and the red connector to the positive post as shown.
5. Using the tester place a 100 amp load on the battery for 5 – 10 seconds then turn load off.
6. Note the tester voltage. A good battery should return close to 6 volts. If the tester voltage only returns to 5 volts or less the battery may need to be replaced.

Note: If less than 6 volts the battery needs to be charged using a 1.8 – 2 amp slow trickle following the charger instructions.

7. Remove the tester connectors.
8. Reinstall the vehicle connectors onto the battery terminals (positive terminal **first** then negative terminal) and torque the terminal nuts with 150 inch-pound force.

Safety: Never use an impact driver to tighten the terminal nut or overtighten with any wrench. Damage to the battery post, even causing it to arc and melt, can occur when overtightening.

9. Repeat steps above for the remaining 7 batteries.



Replacing A Fuel Sender – Kohler 750 / Intimidator 800 / Kohler 1000

Step 1 – Checking out Fuel Sender



Material: Fuel Sender (Part #786-2004-00)

Tools: OHM meter

Safety:

- Place the UTV in Park on level ground, turn off the ignition, remove key.
- Keep all open flames (including ***no smoking***) away from fuel tank when removing the fuel sender.

1. Connect the new fuel sender to be installed to an OHM meter as shown.
2. Set the OHM meter to 2K ohms and test the sender with the float at the top, middle, and bottom of sender.

Readings for a good sender are

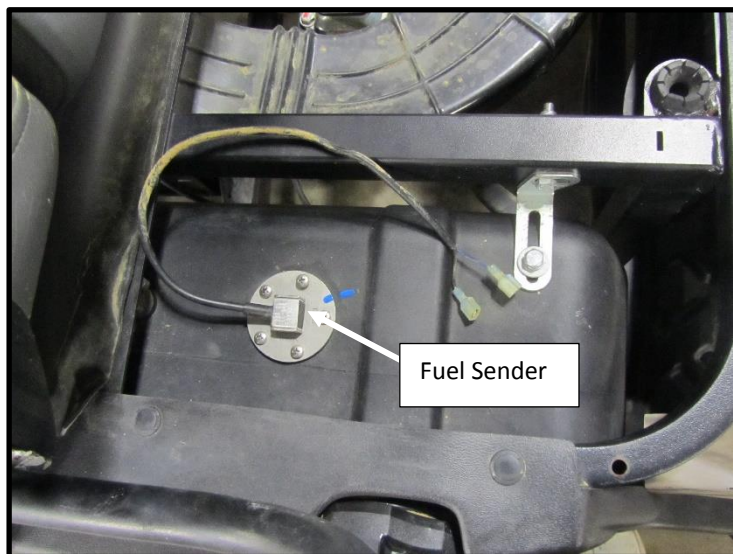
- Float at top - .032 K ohms
- Float at middle - ~.094 - .104 K ohms
- Float at bottom - .240 K ohms

Note: If readings are not in these ranges they fuel sender is likely defective and a new one should be tested. Call Intimidator if you have questions.



Replacing A Fuel Sender – Kohler 750 / Intimidator 800 / Kohler 1000

Step 2 – Replacing Fuel Sender



Material:

Tools: Phillips screw driver or bit

1. Remove the rear seat and raise the bed.
2. Locate the gas tank and fuel sender in the rear behind the passenger seat as shown.
3. Disconnect the two leads from the fuel sender.

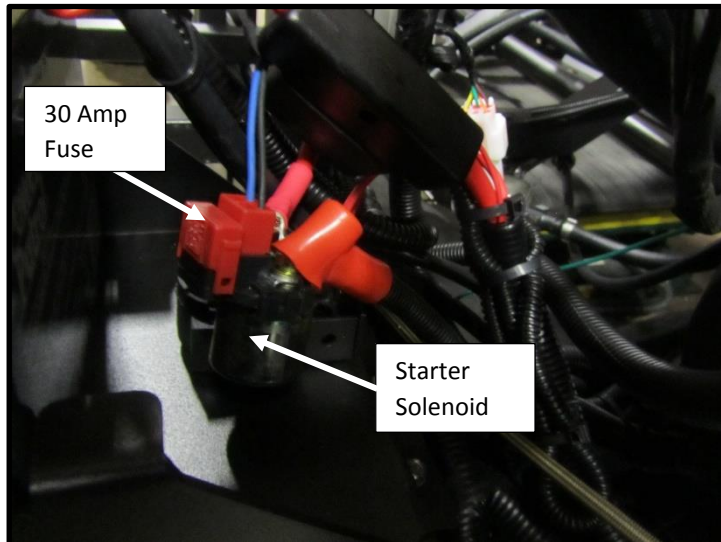
Note: Leads are under the fuel tank.

4. Using a phillips bit remove the fuel sender from the gas tank.
5. Mount the new fuel sender and tighten screws.
6. Reconnect the 2 leads - black to black and blue to blue – as shown.
7. Start the engine and verify that the fuel sender is working properly.



Replacing the Starter Solenoid – Intimidator 800

Step 1 – Getting Started



Material:

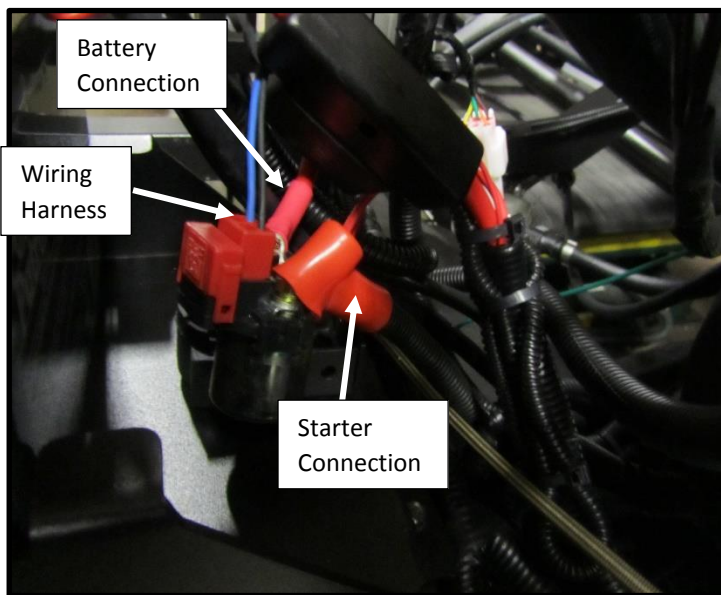
Tools:

Safety:

Place the UTV in Park on level ground and turn off the ignition.

1. Raise the bed and locate the starter solenoid in the back on the driver's side.
2. Before removing the solenoid check the 30 amp fuse on the starter as shown and verify it is good. Replace if needed.

Step 2 – Disconnect / Remove the Solenoid



Material:

Tools: 10 mm wrench

1. *First* disconnect the post on the starter solenoid attached to the positive post on the battery using a 10 mm wrench (as shown).
2. Disconnect the wiring harness and then the connection on the second post on the starter solenoid to the starter.
3. Remove the old solenoid.



Replacing the Starter Solenoid – Intimidator 800

Step 3 – Install New Solenoid



Material: Intimidator part # 715-4000-00

Tools: 10 mm wrench

1. Install a new solenoid in reverse order by connecting to the starter post first.
2. Verify the fuse is good then install wiring harness.
3. Make the connection to the positive post on the battery *last*.
4. Start engine and verify that starter is working properly.